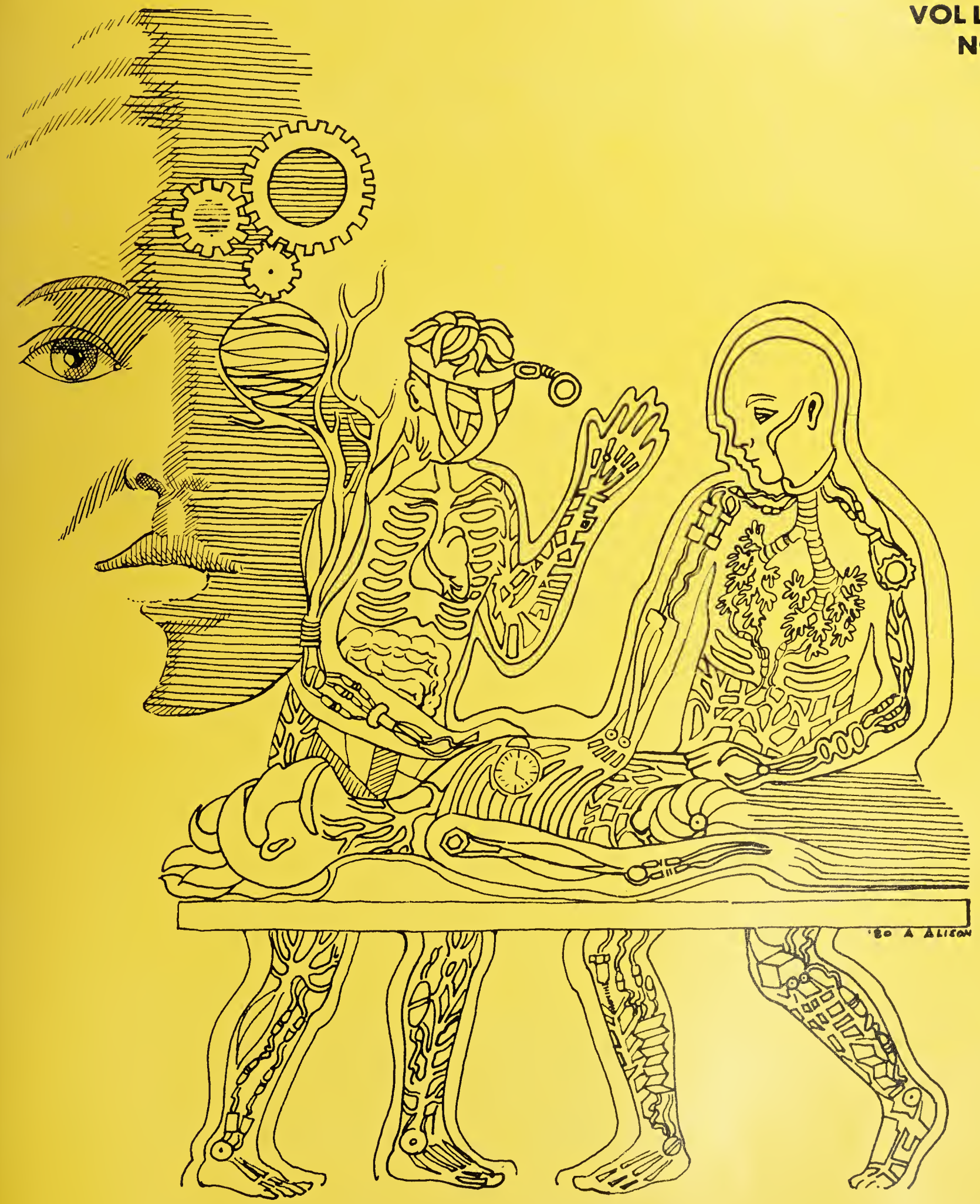
University of Toronto
Library, Serials Dept.
Toronto, Ont.
M5S 1A5

MEDICAL JOUR

UNIVERSITY OF TORONTO

VOL LVII
NO 4



Digitized by the Internet Archive
in 2018 with funding from
University of Toronto

https://archive.org/details/medjournalApr1980uoft

medical journal university of toronto

Established December 1923
An Undergraduate Publication

Volume LVII
Number 4

Editors-In-Chief. . . . . Robert Hegele 8T1
Dorianne Rheaume 8T1

Journal Staff. . . . . Alexandra Berezowskyj 8T2
Davy C.H. Cheng 8T3
Rob Feher 8T2
Marion Frendo 8T2
Connie Hsia 8T2
Bob Jin 8T2
Lin Leung 8T1
Mararet Macpherson 8T1
Janet Morrison 8T3
Jenny Simpson 8T1
Anne Summers 8T2
Heather Pearson 8T1
Harold Pupko 8T3
Les Urbankiewicz 8T1

Advertising Director. . . . . Bart Harvey 8T1

Cover. . . . . Adrienne Alison

Past, Present and Future of Paediatrics-A Viewpoint. 98

A Survey of the Career Choices of the Class of 8T1. 99

Not Quite Everything You Ever Wanted To Know About Computers In Medicine-But It's A Beginning. . 108

Acronymphobia. 112

Book Review. 113

Blunt Dissection. 115

Legal and Financial Liability of Medical Students and Interns. 116

Writing Contest. 121

GUIDELINES FOR PUBLICATION

1) All articles intended for publication should be submitted to the editors before the deadline which is usually six weeks before the release of the Journal
2) Submitted articles should be typed (or legibly printed) double-spaced, single sided on paper 8½" x 11" (letter size) and they should not be more than 15 to 20 pages (3000 to 4000 words)
3) Illustrations, graphs, diagrams and figures should be put on a separate sheet and identified by Arabic numerals A list of explanatory legends for all the figures and diagrams should be put on another sheet Do not write on the back of photographs
4) References should be checked with the original sources, designated by Arabic numerals in the text, numbered in order of appearance and put on a separate sheet Each periodical reference should include in order the author's name and initials, title of the article, Journal name, volume number, page number and year (eg , 1 Rosen HJ Lumbar invertebral disc surgery review of 300 cases *Can Med Assoc J , 101 317, 1969*)
5) The editors reserve the right to make such editorial changes as are deemed necessary to ensure correctness of grammar and spelling, clarification of statements and conformity to Journal style
6) Acceptance for publication is subject to the understanding that such material is submitted solely to the Journal and will not be reprinted without the consent of both the editors and author

Past, Present and Future of Paediatrics- A Viewpoint

James A. McKee M.D., FRCP(C)

Dr. McKee received his M.D. degree from the University of Toronto in 1951 and his fellowship in Paediatrics in 1956. He remained in Toronto at the Hospital for Sick Children and lectured at UofT from 1957 to 1965. Dr. McKee then moved on to the nation's capital as a professor and then Chairman of the Department of Paediatrics, University of Ottawa. Dr. McKee is presently Chief of Medicine at the Children's Hospital of Eastern Ontario, Ottawa.

When one considers an account of Canadian medicine and more specifically Canadian Paediatrics during the past century, one quickly realizes that it can only be a bare summary of the facts. Nevertheless, it is fascinating.

The pattern of human illness from 1867-1900 was decidedly different from that of today, due mainly to the prevalence of communicable diseases that are no longer a problem. Epidemics of smallpox, cholera, dysentery, typhoid fever and influenza swept across the country carrying off thousands in early and middle life. These epidemics resulted from a lack of knowledge of the principles of public health, and an absence of adequate sewage disposal and protective measures against flu or other viruses. There was no compulsory vaccination or innoculation against infectious diseases. Maternal mortality was high. Thousands of children suffered from rickets and scurvy.

The practice of medicine was very different because of the smaller population, the slower pace of life and different social customs, communication and transportation.

With the turn of the century changes occured rapidly. More advances have been made in the past 79 years than have been made in any equal period in the past. The expansion of our knowledge has become so great that no one person can know it all.

In the 1920's, physicians such as Brown in Toronto and Gold Bloom in Montreal were the first to devote their lives to caring for children. They were among the first to talk about infant feeding. They developed milks such as lactic acid and protein, and cereals such as Pablum to feed the infants properly which cut infant mortality dramatically. In their wake, the paediatrician or child care specialist developed. He/she was skilled in feeding the infant and child, immunizing and protecting against infectious disease. The paediatrician thus became the primary care

specialist for infants and children. In all of Canada, the paediatrician looked after 10-17% of children (the higher percentage in the urban areas). With the advent of antibiotics, polio vaccine, and Rh control to name but a few examples, the emphasis became one of prophylaxis rather than treatment of illness. The treatment of learning problems, speech deficits and child welfare all came within the paediatrician's sphere of interest.

As this was taking place in the late fifties and early sixties, the College of Family Practice began its early development. This College felt that a physician needed at least two and possibly three years postgraduate training in order to function adequately as a family physician. As well as the routine illnesses, the psychosocial aspect of illness was also emphasized. The care of infants and children, routine and prophylactic, was emphasized with three to four months of training devoted to this area. The finished product or graduate of these programs was thus able to look after the whole family from birth, through childhood, adulthood and death.

Thus today we find two groups competing for the care of the child, particularly in the larger urban areas: the paediatrician in his primary care role, and the family physician also in his primary care role for the whole family. Who is right? Are they both right? That is the question that the medical profession is faced with today. Paediatrics is perhaps the first one to have this question to answer, but Internal Medicine also is finding itself in the same position.

Speaking as a paediatrician today, I find there is no easy answer. To the south of us, the paediatrician is a primary care physician with two and now three years of training, who looks after infants and children. There are also subspecialist paediatricians in hospitals who have taken extra years of training to qualify as hematologists, etc. Across the way, Great Britain presents the opposite end of the spectrum with consultant paediatricians who do not engage in primary care but act solely as consultants for the family physician and administer secondary and tertiary care as required.

We in Canada are somewhere in the middle. We have paediatricians who are doing primary care, some who are doing mixed primary care and consulting and a small group doing consulting only. All have required at least four years of training to qualify.

Where do we go from here? A solution might be that over a decade or longer, all paediatricians would become consultants, i.e. taking four years of post-graduate training and then limiting their practice to consultant work only and doing the secondary and tertiary care they were trained for. This then would leave primary care to be carried on by someone else, e.g. the family physician. However, at present the family physician is receiving only three or four months of paediatric training which is felt by the paediatrician to be inadequate preparation for giving good primary care. There would appear to be a need for a child care specialist who would receive more training than the family physician and less than the paediatrician.

This is the problem with which we are dealing now and will be in the future. The lines are being drawn. The answer will come as paediatrics and family practice evolve further. □

A Survey of the Career Choices of the Class of 8T1

Lin Leung 8T1

Members of the Class of 8T1 were recently surveyed regarding their career choices for future practice and their perceptions of various medical disciplines. The survey was conducted after thousands of hours of didactic lectures and clinics, and within only a few months of the clinical clerkship. The objective of the survey was to gain some idea of how informed medical students are about medicine as a profession, rather than as groups of diseases.

The survey was conducted in three parts. Part I determined the distribution of career choices among students. The second part elicited student impressions (serious and humorous) about the routines and work habits of MD's in 40 different disciplines. Part III consisted of 14 clinician interviews conducted by Les Urbankiewicz and the author.

Approximately 330 survey forms were distributed to the class of 253 students. 223 students replied, 5 refused to participate and the rest were off studying. Each participant in the survey was asked what his/her choice of future practice had been 2 years ago and what it was at present. Of the 223 students who returned the forms, 21 did not indicate their choice of practice and were grouped under the "undecided" in this survey. Among those who indicated their choice of practice both now and 2 years ago, 61 people had changed their career decision. 25 people who were undecided 2 years ago had recently decided on their career direction and 13 respondents who had been sure of their choice 2 years ago joined the undecided. 58 students, a quarter of the respondents, remained undecided. Those who opted for general practice or family medicine remained die-hard in their choice. There was a 136% increase in the number of people wanting to practise general internal medicine. Many of these students had previously decided on family practice or surgery. There was a significant reduction in the number of people choosing pediatrics, psychiatry and neurosurgery. No respondent elected to choose Radiology, Neurology or Pathology—disciplines to which we have had considerable exposure. The following table is a breakdown of candidates with their favoured disciplines at present and 2 years ago. Those who wrote down more than one discipline were counted as undecided. Of the presently undecided, some indicated that their number of choices had decreased.

The class of 8T1 also contains people who are interested in less traditional medical disciplines. Some respondents have seriously (?) considered the following careers:

Investment Consultant
Real Estate Inventor
Talk Show Host
Dentist
Lawyer
Guitarist
Dean of Medical School
To Serve the Third World
Sex Therapist - more than one

Summary of Responses

1. What type of routine do these MDs have and what does their specialty entail?
2. What type of patients do they see?
3. How many hours/week do they work?

Because of the large number of specialties involved, it was not possible to survey all the respondents for their ideas on each discipline. Instead, randomized groups of about 25-30 respondents were asked for their impressions on a randomized group of 5 specialties. Although the chi-square test was not done, these results are considered to represent the "Student Distribution". It was thus felt that the confidence and significance limits approach 100%.

CHOICE OF FUTURE PRACTICE

	Present Choice	Choice 2 Years Ago
General practice	27	24
Family practice	47	42
General internal medicine	26	11
Neurology	0	1
Cardiology	2	1
Endocrinology	3	3
Oncology	1	2
Respirology	1	0
Urology	1	0
Dermatology	1	1
Rheumatology	1	0
Geriatric medicine	0	1
Pediatrics	3	8
Pathology	0	1
Psychiatry	4	8
Emergency medicine	2	0
Nuclear medicine	0	1
Space medicine	0	1
Obstetrics/Gynecology	6	4
Radiology	0	1
Ophthalmology	5	1
General surgery	4	12
Orthopedic surgery	3	2
Neuro-surgery	1	6
Cardiac surgery	2	1
Plastic surgery	0	1
Surgery - types undecided	7	5
Medical research	2	5
Undecided	64	79
TOTAL	**213**	**222**

In general, fellow students wrote more on the disciplines in which they have had at least 6-12 weeks of clinics, and much less on specialties in which they have had lectures only.

SURGERY

General Surgeons

Who are they? One respondent suggested that all residents in surgery are general surgeons. Several said that they operate on anything other specialized surgeons do not work on. Most respondents realized that they operate on GI tract, breast CA, etc. Some thought that general surgeons are obsessive-compulsive hand washers. They are the earliest ones to arrive at the hospital in the morning. Their morning rounds are held when both they and the patients are still half awake. They often claim that they are frustrated internists and that internal medicine is that part of surgery which they call conservative management. But, have you ever met any general surgeon who favours a "conservative" cut? Someone wrote, "When in doubt, cut it out". Most respondents agreed on their working hours being 60-70 hours per week. Three thought that they work from 9-5, and that they operate every morning and do rounds in the afternoons.

Chest Surgeons

Some people suggested that chest surgeons are the 'elite' of all MDs. One is not sure why. Is it because their net income tops the list, as one student wrote? Is it because they work more hours than most other MDs? Some respondents worried that they may neglect their spouse and children. Or is it because a large proportion of their patients are "elite" smokers, smoking 3 packs per day? The general consensus was that chest surgeons remove chunks of lungs of various diseases, with cancers at the top of the list, followed by C.O.L.D. and trauma. They were considered to work extremely long hours. One person thought that they sleep in the operating rooms whereas another one said that they work from 9-5. One person applauded "chest surgeon, life saver!"

Cardiac Surgeons

Chest surgeons and cardiac surgeons were considered to be very similar in this survey. Someone, who bears a special admiration for cardiac surgeons, presented a vivid description,

"They make nurses' hearts flutter,
their patients' hearts fibrillate
their lovers' hearts throb, and
their bankers' hearts swell."

Their working hours were quoted from 12 hours per week to 20 hours per day. Most people chose 60 hours/week.

Neurosurgeons

Neurosurgeons were described as "living in a world of his own", "very intelligent" and "have a brain which can memorize anything, also they expect students to memorize every item in the neuroanatomy book". "Their work is very challenging and previous experience with woodwork would be an asset". Some people considered neurosurgeons to be "highly respected in the community". Others regarded them as "arrogant". However, many students were keenly aware of the low success rate of neurosurgery despite the skills and hard work of the surgeons. This may be the reason for someone to compliment neurosurgeons as being "very special persons" and the reason to account for a substantial decline in the number of students choosing neurosurgery from 2 years ago. The estimated number of hours of work ranged from 30 to 100 hours/week: most people guessed 70 hours.

Orthopedics

We always talk about doctor-patient rapport. One could think of no better doctor-patient interaction than that of an orthopedic surgeon

and a carpenter as a patient. Imagine the content of their conversations: different kinds of chisels, hammers, saws, screws and anything else that can be used to cut, drill, nail and connect. They must learn a lot from each other. "Carpenters can actually enter the R 3 programme as orthopods".

When one mentions patients, one automatically envisions elderly ladies with hip replacements. But actually, orthopods are seeing more and more young athletes, as many observed. Unlike all other surgical disciplines, orthopedic surgeons "spend much time in screening malingerers who want to get workman's compensation". Many people pointed out that orthopedic surgeons spend some of their time in research.

Most people thought orthopedic surgeons work 40-50 hours per week. One mentioned that these surgeons are "definite workaholics—they put in 40 hours/day".

Urologists

Just as respirologists consider chest x-ray and arterial blood gas as part of their history and physical examination, urologists would consider cystoscopy and IVP as part of their routines. They treat a fair number of enlarged prostates, bladder dysfunctions and most people thought that they work 40-50 hours per week. One described urologists as "plumbers" retrieving stones from ureters.

Plastic Surgeons

Moslems go to Mecca, plastic surgeons go to Hollywood. This was the general impression most respondents had of plastic surgeons. They certainly qualify for Oscars for their contribution to the continuing success of many stars and first ladies. They should also be accepted for membership in the Ontario Art Gallery. "Anyone can cut, if some training is provided. But plastic surgeons cut to model and that's difficult", one admirer exclaimed. They are the artists of the medical profession. Most people think plastic surgeons work 9-5, 40 hours per week.

Ophthalmologists

Of all the specialists, ophthalmologists seemed the most impressive. "They offer both medical and surgical treatments". "They know everything about their field—macroscopically and microscopically—because the eye is so small", as one respondent put it. They are meticulous part-time surgeons, interested in the finest details to the extent of using operating microscopes. They work in nice offices, see otherwise healthy patients and are very well paid. Most of their time is spent in fitting glasses and seeing kids with strabismus. They work 9-5, rarely get calls. "Nice and easy job", most of the respondents wrote.

Otolaryngologists

Like ophthalmologists, otolaryngologists also offer medical and surgical treatments. ENT people hold a few records: they use the largest number of tongue depressors and they transilluminate more frequently than any other profession. They have perfected the technique of audiometry to such an extent that they can measure EEG responses to sound. (The Workman's Compensation Board must welcome this new development.) One student thought that they only see naughty kids who plug their ears, nose and trachea with marbles, twigs and keys. More than half of the people said that ENT people probably work 40 hours per week; one said 80 hours/week.

MEDICINE

General Practitioners

They are "Jack of All Trades". They see patients of all ages, work at least 40-60 hours per week and they are on call at all times. One respondent thought that GP's work between 80-120 hours per week.

Family Practice

Most people described the routine in a Family Practice setting as very similar to that of a GP. As a matter of fact, someone said that Family Practitioners are G.P.'s with an extra certificate. Another pointed out that Family Practitioners give counselling to families. A few were confused and said that they changed their career choice from General Practice two years ago to Family Practice after Dr. Reginald Perkin, representative of the Family Practice Association, indicated to the class that his Association has been working hard to prevent GP's from doing family practice in Ontario. Their working hours were considered to be the same as the GP's, but a few thought that they work from 9 to 5.

General Internists

The general consensus among the respondents was that general internists are super GP's who spend a lot of time in teaching, and rescuing interns and residents in the emergency room. They were thought to work 40 to 50 hours per week and that the hours are probably flexible. They are on call "for non-specific (sic) medical problems out of the scope of general practice".

Rehabilitation Medicine

Half of the respondents on this item were vague in their description. Some left it blank, some filled in with a question mark. Some associated Rehabilitation Medicine with good massages. Do they intern on Yonge Street? Many thought that they see patients with strokes or orthopedic disorders, and work 40 hours per week on a 9 to 5 schedule.

Gerontologists

Unlike other medical specialties in which MD's are considered to be more interested in the diseases than about their patients, gerontologists are pictured as "nice guys". Most people thought that they are sensitive, patient and that they handle patients with multiple problems. Their patients are old, many of them with strokes and senile dementia. Several respondents never heard of this discipline and most people had no idea how many hours they work. Some said 40 hours per week and tht the prerequisite to go into this discipline is to read the books on "The Joy of Old Age".

Neurologists

Fascinating people! Everybody seemed to have a different idea of what neurologists do. Even the number of working hours was anybody's guess: ranging from 24-30 hours per week to 50-70 hours per week. Since it would be so difficult to

summarize the ideas of the respondents, perhaps it is more realistic to quote them:

"Very intelligent, precise, refined, personable..."

"Knows everything, does nothing". (These are probably from people who had a tough time learning the nerve tracts, nuclei, etc.)

"9-5 detective work"—probably from a Sherlock Holmes' fan.

"Sometimes ruthless in eliciting clinical signs"—one recalled the neurologist who borrowed keys from his medical student to elicit an equivocal Babinski's sign. He then tried keys from a Datsun, Rabbit, Chevy, Volvo, BMW...

One responded that the activities of neurologists are "almost obsolete, replaced by CAT scanners".

Imagine the day when this becomes true: patients are relieved not only from being pricked with car keys, but also from being hit with a rubber hammer on their knees, arms and chin, being shone with a pen light in their eyes, being asked to fake smiles, to show their teeth and tongue, to shrug their shoulders...Amen.

Endocrinologists

The impressions of endocrinologists varied tremendously among respondents—from "good guys, treat patients well and actually help people", "broad-minded, very kind, write a lot of papers that nobody reads", to "they caress young girls' necks" and "know everything but the effective treatment". All agreed that they empathize with fat ladies' complaints and see "truck loads" of diabetics. They are buoyed by any new drug on the market and are crazy about cyclic AMP. Unlike neurologists who virtually make a diagnosis on physical signs, endocrinologists make a diagnosis "by exclusion". Indeed, the signs and symptoms of hormonal diseases are so equivocal that one respondent protested, "I don't believe in hormones or anything else I can't see". They were considered to work 40 hours per week.

Respirologists

In contrast to conceptions of neurologists, everybody agreed who a respirologist is and what they do. They are people who see a lot cigarette smokers, a lot of asthmatics, and they work about 50 hours per week. Chest x-ray and arterial blood gases are part of their physical examination. A respirologist once remarked, "asking me whether the patient needs blood gases or not is just like asking a barber whether you need a hair cut. The answer is Yes, of course".

Allergists

Allergists are absolutely indispensable because they see a large proportion of hypochondriacs, according to several well-informed respondents. They work from 9 to 5, 40 hours per week. They either find the patient allergic to nothing or to everything. "If ventolin or antihistamine does not work, then prescribe steroids, and don't forget to give adrenalin to florid bee stings".

Cardiologists

These people have "a unique lifestyle of their own", according to many. "They are excessive achievers, having time-urgency and hostility". "They hear clicks and ticks nobody else hears" and "would have been cardiac surgeons if Cardiology has not been created as a specialty". "They exercise their poor patients on the treadmill until they pant worse than a rat who has been trained to tread with positive reinforcement". One may think that reinforcement in this situation goes to the cardiologist who sees ST depressions. Imagine the patient gasping for air as the cardiologist, meticulously studies the ECG with his shiny calipers!

There are times when cardiologists "play with wires" too. That's when they want to put a catheter into the patient's heart. "Do they ever relax, say, watch TV?", someone wondered. Sure, that's when they are doing cardiac echoes. To be fair, most agreed that many are nice and easy-going.

Several respondents said cardiologists work 40 hours per week. Most realized that they work long hours. The patients they see: either elderly or kids with valve problems.

Hematologists

The impression of hematologists was that they spend half of their time seeing patients and half of the time doing lab work. Indeed, they may spend so much time at the microscope that they have "little application of clinical skills". Several students thought that hematologists are seeing fewer and fewer anemic patients nowadays since GP's have been taught to prescribe iron pills and vitamins. They keep themselves busy with leukemic patients and bone marrow transplants. Most respondents realized that many of the hematological patients are very sick and dying. The majority said they work 30-40 hours per week. Others said "60-70 hours".

Gastroenterologists

At a time when neurologists get CAT scanners and cardiologists get echo machines, it seems only reasonable to expect that gastroenterologists acquire some less invasive tools. But, no! They get these "fibre-optic endoscopes" which can be inserted into either ends of the GI tracts and go in deeper and deeper as the optics improve more and more. If that is not enough, "they invite radiologists to give patients some barium from either end" and place them topsy-turvey, in positions that would make the authors of Karma Sutra feel inadequate. One is left to question why patients thank their gastroenterologists so enthusiastically.

Respondents tended to think that their patients are chronic complainers. Gastroenterologists work 40 hours per week and only a few people thought that they work 60-70 hours per week.

Nephrologists

The first things they look for are swollen ankles and wrinkled skin. The next thing they do is give patients a bottle to catch a mid-stream urine. One respondent explained, "sodium, potassium and water are as important as bread and butter to the nephrologists as these ions are the life of yours and mine". Small wonder, then, that nephrologists "enjoy confusing students with acid-base physiology". Some students thought nephrologists do much the same as urologists except that they don't do operations. Other thought nephrologists spend much of their time looking after patients on dialysis and sometimes doing kidney tran-

splants! They work 40 hours per week. Very few thought they work 50 hours or more per week.

Rheumatologists

They work "good hours"—40 hours per week. They see a lot of patients with "connective tissue diseases". It must be difficult to diagnose these diseases. At the least count, there are seven types of such diseases in a book as elementary as "Primer on the Rheumatic Diseases" which is for "students and house officers". Perhaps it is not important to make these diagnoses, "since so long as one prescribes either steroids or aspirin, one is bound to alleviate the symptoms of the patient, and who can offer more than that?" Some respondents said that part of the job of rheumatologists is to treat "rheumatic heart diseases". This must fortuitously provide a rare chance for cardiologists to meet rheumatologists.

Obstetrics/Gynecologists

When it comes to obstetricians, the impression is genuinely favourable. "They assist the birth of new lives", "they have easy-going personalities", "they are often rewarded with sherry and brandy by the happy mothers". One respondent said he once seriously considered this specialty, however, the nasty habit of babies coming into the world in the middle of the night cooled his plan. One respondent wrote, "most of their patients are female". This respondent did not specify who the rest of their patients are.

When it comes to gynecologists, most people associated their job with repairing bladder dysfunction, uterine prolapse and infections. One felt that it is a "business mixed with pleasure". Most respondents thought these MD's work extremely long and irregular hours (70 hours or more). Only a few said that they work 40 hours or fewer per week.

Dermatologists

Many respondents considered dermatology a "superficial specialty" and that dermatologists enjoy a "simple life". They make diagnoses by "looking and feeling". The lesion (which means whatever goes wrong) is either squamous, or papular, or if they are not sure, papulosquamous.

The following table was compiled by the editors from information obtained during interviews with various specialists practicing in Toronto, (see acknowledgements).

Specialty	Requirements	Hrs/wk	Clinic/OR	Comments
General Surgery	4 yrs. (usually 6 mos. in different subspecialties)	60-80		"Surgery is not just a job, it's a way of life." - demand for general surgeons.
Orthopedic Surgery	5 yrs. I - research II, III - 6 mos. in each of neuro-, plastic, orthopedic, general surgery and ICU. IV, V - 6 mos. pediatric surgery and 18 mos. adult. Most do another extra "fellowship" year in a particular specialty.	60-80 plus call		
Chest Surgery	4 yrs. general surgery 6 mos. cardiac surgery 18 mos. thoracic surgery	60 plus call		
Plastic Surgery	2 yrs. general surgery 2 yrs. plastic surgery 1 yr. research (not obligatory). Many spend an extra year in an area of interest.	55-65 plus call		deal with traumatic injuries, congenital anomalies, burns, cosmetics, etc.
Urology	4-5 including 2 yrs. urology 1 yr. general surgery	60		- do endoscopic and open surgery - demand = supply
Anaesthesia	1 yr. medicine 3 yrs. clinical anaesthesia or may include 1 yr. research	40 - 60 incl. call		- demand for anaesthetists
Emergency Medicine	2 yrs. rotation through neurosurgery, plastic surgery psychiatry and others.	40		"Emergency physicians face not only the intellectual challenge of medical diagnosis, but also the intricacies of human relationships." - no follow-up, no office overhead, fixed work weeks - high stress levels — short careers?

Specialty	Requirements	Hrs/wk Clinic/OR	Comments
Hemotology	2-3 yrs. internol medicine plus ot leost 2 yrs. in hematalagy. - mony do on extra yr. in on oreo of interest.		- field is relotively full at the moment.
Neuralagy	1 yr. medicine 2 yrs. clinicol neurolagy 1 yr. bosic science (Teaching hospitols require odditianol troining).	60 plus call	- general shortage of neuralogists.
Clinicol Biachemistry	Royal Callege 4 yr. fellowship program. or Con. Saciety af Clin. Chem. 3 yr. pragrom	45 plus light coll	- supervise and develop service chemistry tests, loborotory management, occosionally cansultant service. - wide open
Rodiology	1 yr. medicine, surgery basic science or reseorch 3 yrs. diagnostic rodiology	48 plus	- lorge demand
Pothalagy	4-5 yrs. including 1 yr. of research	40 plus light coll	- fixed salory ar fee for service. - demond in smoller centres.
Rehobilitotian Medicine	1 yr. internol medicine 6 mas. arthapedic surgery 2½ yrs. rehab medicine (moy include bosic science or research)	40 - 50	- "physiotry" - neurologicol rehobilitatian, spinal cord injury, cordioc rehabilitation, etc. - head rehob "team" - great demond.
Clinical Phormacalagy	2-3 yrs. internol medicine 2 yrs. phormocalogy	60	- research, planning of theropeutic triols, develapment of non-invosive methods for meosuring drug effects, cansultonts on drug usoge ar reoctians, teoching, etc. - presently quite o few jab apenings.
Occupotionol Medicine	post-groduote	depends on whether warking for o compony or in private	1.) protecting warker against occupatianal hazards eg.) screening far early diseose 2.) ensuring thot warkers ore placed in a job thot motches ond compliments their physical and mental obilities eg.) advice abaut placement which will not hinder recovery or compromise heolth. 3.) preventive heolth eg.) alcahol and drug abuse pragrammes, stress counselling, potient educotion.

Using this trade secret, plus a lot of creativity and imagination, they impress any student by their ability of making diagnoses "on the spot". Treatment of the lesion is also simplistically defined—"If it is wet, dry it. If it is dry, wet it". They may also freeze it, cut it off, burn it off, or cover it up. "Good hours (less than 40 hours per week), nice office and handsomely paid". One respondent considered the work too low key, another worried that it may be difficult to get into the residency programme.

Oncologists

About half of our respondents thought that Oncology is a very depressing field and that oncologists spend much time in consoling families. They see "patients in deep trouble", and they spend much time in research, according to a few students. Someone who must be quite perceptive, indicated that oncologists spend the morning seeing patients in ongoing treatment and the afternoon in evaluating new patients. Have you ever heard of any specialty in which the MD has to spend so much time evaluating new patients? If the patient turnover is indeed so fast, one wonders where the oncologists' "depression" comes from. Most people thought that oncologists work 40 hours per week.

Microbiologists

Unlike oncologists, who are constantly frustrated by relapses of symptoms and signs of their patients, microbiologists can cure their patients. many people have the following impression of microbiologists: British academics who spend many hours in the laboratory. They work a 9-5 job, 40-50 hours per week. "This is an ideal job for doctors who do not want to see patients", one respondent wrote.

Parasitologists

These are MD's who are interested in diarrhoeas. If you run out of scotch tape, go to find a parasitologist. He/she probably carries a roll of scotch tape in his pocket in case he needs to do a scotch tape test for pin worms. They were considered to have the same life style as microbiologists.

Radiologists

They love work in darkness! In fact, they are interested in shadows. They see patients in 2 dimensions. Working hours are good, according to many respondents. They work from 9 to 5, 30 to 40 hours per week, leaving plenty of time for sailing and politicking. Although they are on call, they are almost never called. Someone evern went so far as to give this sample: whoever decides that a patient should have emergency x-rays in the middle of the night should read the films himself. This means that one should not wait for the radiologists to come in, because, if they do come in, they either prove that you are wrong (in that case you are sorry that you have called them to come), or they agree with you (in that case, they are not happy that you have called them).

Nuclear Medicine

A radiating discipline! These people have to be hospital-based. They work 9 to 5, 40 hours per week. They do a lot of "scans" and "interpret" them often as "diffuse density, lucent areas, homogeneous pattern...etc." One suspected that no one knows how to interpret their interpretations. They have already invented liver scan, lung scan and brain scan. A respondent said, "wouldn't it be marvellous if they could also invent a scan for VD; this discipline would then become the largest and busiest of all specialties".

Laboratory Medicine

"These are usually bright people without social skills". "They do research and play with piles of paperwork". Some said, "Their technicians do their samples". Others said, "They work with many test tubes". Research or no research, they look after laboratory quality control. Their work "is probably quite interesting", "may hopefully or coincidentally benefit the people they choose to avoid by hiding in their labs and playing with their mice", "could be extremely boring". All respondents agreed that they do not see patients and work less than 40 hours per week. Only one thought that they work long hours.

Clinical Pharmacologists

Most respondents had no idea of what these MD's do. Some suggested that they do not see patients. As a matter of fact, when it comes to their working hours, someone suggested that it is the same as a high school teacher. Another siad they work library hours. Many people guessed 40 to 50 hours per week.

Toxicologists

Toxicologists were thought to be concerned with forensic research, drug levels, narcotic overdoses, poisons and occupational exposure. They do some autopsies. Working hours are regular, 40 to 60 hours per week.

Epidemiologists

Many respondents were not sure if epidemiologists are MD's. Most agreed that if one is statistically inclined, interested in the interaction of environment and people, and like to sit in the office screening data and writing computer programs, one is almost an epidemiologist already. Some people thought that epidemiologists work a 30-hour week. MD epidemiologists do exist as there are such training programs in a number of medical faculties across Canada. But are they ever on call? It is conceivable that someone might page an epidemiologist to find out the prevalence of a certain infectious disease at 4 a.m. But the probability of this event must be infinitesimal. All epidemiologists must be aware of this at the time they choose this specialty.

Pathologists

A number of respondents were right! These are the people who define diseases. When a patient has been referred to all the specialists and does not do well, he/she is finally referred to the pathologist. Unlike the cardiologist, who prefers to examine patients in the 45° erect position, the gastroenterologist who uses the left lateral position and the gynecologist who uses the lithotomy position, pathologists choose to examine their patients in the supine position. Radiologists make their diagnosis on shadows while pathologists make diagnoses based on extensive, in-depth investigation. Despite this difference in their approach, they are usually quite reliable, and no doubt, share the same kind of on-call schedules.

Anesthetists

These are MD's who "ensure the surgeons operate without the patients screaming or fighting back". Anesthetists must have once been energetic, muscular men in the Middle Ages when anesthetics had not yet flooded the operation rooms. But in the intervening years, technology had advanced so much that muscle power is no longer a necessary prerequisite for the anesthetist. Instead, they talk about their "understanding" of human physiology. Furthermore, with modern technology, they now can supervise several operations simultaneously. Who else can match their efficiency? Someone mentioned, "They squeeze bags hour after hour". Another one described them as "busy inserting tubes into little holes all over the place". Some respondents suggested that anesthetists work from 8 a.m. to 2 p.m. Most thought they work 40 hours per week.

Occupational Health

Twenty-five per cent of the respondents had no idea what these MD's do. Each of the rest of the respondents had his own idea of this profession, "A lot of paper shuffling and politics". "Practise rehabilitation medicine for car accidents and chronic disease victims." "A GP for workers in factories; identify the occupational hazard and plan preventive measures, assist workers to get compensation". "Work as a GP, plus inspect work places". "These are doctors who really should have been engineers or businessmen". "They don't really practise medicine. They refer the workers to doctors if they suspect a problem". "The discipline is too underdeveloped for these MD's to do anything". "They are academics and do research". "They are consultants for government, supervisory functions and consultants to other agencies and private industry". "Really a slow field." "Tend to be very boring people who love epidemiology".

When it comes to work, every respondent agreed that it is the same as office workers in big corporations.

Emergency Medicine

They have "extensive knowledge, can work under pressure". They are "on call 24 hours a day, 7 days a week". They never say "take 2 aspirins and call me tomorrow. Instead, they take care of patients who were told to take 2 aspirins and call the next day".

"People are always glad to see them". The above quotes speak for themselves. Many respondents thought that emergency medical doctors work in shifts and have no patient follow-up.

Psychiatrists

People in the 8T1 class displayed some degree of disillusionment with this discipline as evidenced by the fact that of the eight students who two years ago wanted to be psychiatrists, only four remained. Most respondents split into 2 camps regarding how psychiatrists work. Camp #1 thought that psychiatrists are talkative. Camp #2 thought that psychiatrists listen and act interested. A third view probably provided a unifying approach. The patients were considered to include schizophrenics, neurotics, depressives, and other "shrinks".

Pediatricians

These doctors of "small adults", "short people" and "little people" are genuinely praised for their patience. One respondent thought that sign-language and ESP might be helpful in this specialty. Someone suggested that, if one is in doubt whether he would make a good pediatrician or not, just try to get kids to open their mouths without making them cry. The chance of becoming a good pediatrician is proportional to the percentage of kids on whom one can successfully complete this task. There are some not-so-successful pediatricians. They quickly become customers of the ENT specialists for treatment of high pitch conductive hearing loss. (Someone thoughtfully pointed out that they should be allowed to collect Workman's Compensation.)

Most people considered pediatrics a very stressful specialty requiring a lot of patience both with kids and with parents. Pediatricians were considered to have very irregular working hours and to be paid next to the lowest among specialties.

Conclusions

It appears that students, in general, decided on surgical versus non-surgical careers very early in medical school. Furthermore, they tended to choose only those specialties in which they have had clinics. The class is only a few months away from the deadline for internship applications, yet over 30% of the respondents reamined unsure of a career choice. Over 30% of student who have decided on specialization opted for general internal medicine. Does this mean that knowing something about everything is more secure than knowing a lot about one thing?

Our participants have been most resourceful in expressing their perceptions of the day-to-day functions of medical doctors in various disciplines. They supplemented their writings with poems, proverbs, and most charmingly, by 'doctor and patient' cartoons, which were, unfortunately, not reproducable. The fact emerged, though, that after thousands of hours of lectures and clinics, very little is known about the actual work habits of the various specialists.

(continued on page 126)

as-so´ci-a´tion

----a voluntary organization of persons joined together to pursue a common purpose or objective common to all.

The Ontario Medical Association is an association of practising physicians, interns, residents and medical students which, under a democratic constitution, pursues not only the advancement of the medical profession but also that of medicine itself. The O.M.A. encompasses all specialties of medicine and represents more than 14,000 physicians and aspiring physicians in the province.

For information on joining the Ontario Medical Association, simply write Anne Todd, Supervisor of Membership, O.M.A., 240 St. George St., Toronto M5R 2P4; or phone 925-3264 (Toronto), 1-800-261-7215 (toll-free, outside Toronto).

JOINING IS ONLY YOUR FIRST STEP IN PARTICIPATION.

Ontario Medical Association

Not Quite Everything You Ever Wanted to Know About Computers In Medicine- But It's A Beginning

Bart Harvey 8T1

It was a short distance down the hallway east of the main entrance when I came upon a door marked "COMPUTER-ASSISTED MEDICAL RESOURCE CENTRE." Curious as I was, I pushed the door ajar enough to peer in and examine what was beyond. Within the room, I saw several dozen work tables supporting computer terminals resembling TV screens with typewriter keyboards attached. A young man who was working at a terminal near the door motioned for me to approach him.

As I entered the room I passed by a few other persons working at terminals displaying a variety of information. On one terminal a survival curve for breast cancer patients being treated by radical mastectomy was superimposed upon the curve of those treated by lumpectomy. Upon another terminal was a case description of a man who had presented to the emergency department after a traffic accident. The computer was now awaiting the student, as the physician in attendance, to enter his treatment for the man. I had by now reached the young man who had summoned me and saw that, upon his terminal, he had a three dimensional colour representation of the human heart with the roots of the great vessels and outlines of its four valves quite apparent.

Sensing my curiosity the man explained that he was a second-year medical student who was working on a cardiology tutorial. He then demonstrated how this computerized tutorial not only explained but also dynamically depicted each part of the normal cardiac cycle complete with its blood flows, contractions, relaxations and valvular movements. The student then handed me a pair of headphones and told me to listen. Now, in addition to the written explanation of the cycle appearing below the graphically depicted heart, I was also hearing a computer simulation of the normal heart sounds that would be heard upon auscultation of the precordium.

As the tutorial continued, the computer asked frequent questions of the student. For example, "Where on the chest would the sound of the tricuspid valve closing be clearest?". The student entered his reply and in turn, the computer displayed a message indicating the answer was correct. It then continued with an explanation of the sound-traveling principles which were responsible for this localization. Different physical maneuvers accentuating the heart sounds, as well as descriptions of pathological hearts explaining how and why the dynamics of these hearts were different from the normal, were then presented. In each of the examples, alterations were made to the heart which was "pumping" on the screen and to the heart sounds heard through the headphones so that they simulated the diseased heart being discussed.

Near the end of the tutorial the computer presented a number of related cases to the student. Each of these had a series of questions the student had to try to answer. Some of the questions were concerned with identification of the pathologic condition, while others asked about what kind of past medical history the patient was likely to have had. Still others required the description of heart murmers. After each of the student's replies, the computer commen-

ted upon his answer. If the student was correct the computer would give additional details or explanations concerning the case. On the other hand, if the student's answer was incorrect then the computer would tell him what the correct response was and give an explanation of why it was correct. At the conclusion of the session the computer gave the student a grading assessment based upon his handling of the cases and questions. In addition, the areas that he was strongest and weakest in were described.

The preceding scenario is just one of many present and possible applications of computerization within the field of medicine. The intent of this article is to offer an introductory overview of computers for medical personnel. To do this I have divided the article into four sections. The first is an historical overview, followed by a conceptual description of what the computer is. Second, an analogy is drawn between the operation of a computer and that of a human being. The third section is a comparison and contrast of traditional paper means of storing medical records as opposed to their computerization. At the end of the article is found a glossary of commonly encountered computer "buzz" words.

Historical Overview

Since its retail birth in the 1930's the computer has been utilized in many environments. It is only in recent years, however, that the computer has been applied within the fields of medicine. The analysis of ECG monitoring, full patient ICU monitoring and storage of hospital medical records are just a few of the tasks being carried out with the assistance of computerization.

Conceptual Description of the Computer

To facilitate a conceptual understanding the computer can be described as a "black box" which is capable of performing only those tasks which a human being can do. The computer, howvever, is faster and more accurate than any person could be. In order to illustrate a few of the computer's features I will carry this analogy further by taking you into a tumour clinic in a downtown Toronto hospital.

This clinic is considering the possibility of recording specific information about each patient in order to make available reviews for recall and statistical analyses. There are a number of tasks that must be carried out in order to accomplish these goals:

1. The information must be specified (e.g. dates, names, numbers, laboratory values, etc.).
2. The information must be collected and recorded.
3. The analyses required by the clinic members must be learned, to be performed and reported when necessary.

So, in review, the clinic needs to be able to:

1. Specify
2. Collect
3. Record
4. Retrieve
5. Analyze
6. Report

the data it is interested in.

I will now discuss and parallel two ways the clinic could use to accomplish these goals. One way is to hire a clerical person, the other is to use a computer. In both cases each must be taught what to do within the clinic. The clerical person is taught what to do by clinic members whereas, the computer is taught by programs written for it. Programs are simply a list of actions that the computer is to perform. The clerical person will be told what information is to be collected. He may use a notebook to record this information, perhaps one page per patient, with an alphabetical index in the back to facilitate fast, easy retrieval. The computer, on the other hand, would require a program which would specify the information to be collected and stored. A member of the clinic could then enter patient information using this program. Another program would be required to recall and display any of the stored information. In order to analyze the information the clerical person must be taught what is to be done with the information and how to report the results (i.e. graphs, tables, short summaries, etc.). Likewise, the computer must be programmed to carry out these same analyses and reportings.

It should be clear that the clerical person is capable of doing everything the computer does. Yet, consider the following:

Both were responsible for analyzing information for a clinic of ten thousand patients. Some of the analyses might include listing the names of all the patients who were under thirty years of age at the time of diagnosis or all those who were at a certain stage of disease when they first presented. While it is true that both the clerical person and computer are capable of completing either of these tasks, the computer would do so much faster! The computer would probably take seconds, whereas, the clerical person would probably take days. Also, the computer is 100% accurate. It would not miss a patient or miscalculate a total.

* **Warning** * Computers are programmed by people. Therefore, programs may contain errors. That is, the computer may be carrying out the given instructions with 100% accuracy, but the instructions may not be appropriate for the intended task. Programs must be tested, therefore, to ensure that they are performing the appropriate tasks.

Let me illustrate another situation stressing the advantages of the computer's speed. When a large amount of information is being recorded it is almost impossible for a person to go through it all to insure there is no data missing. The computer, however, can look at every piece of information in a matter of minutes and list those missing. This information can then be retrieved from other sources (charts, lab records, etc.) and entered into the computer to make it complete. This is vital when the information is being used for analysis.

I hope that, as a result of this example and the discussion about it, a few key points have become clear. These are:

1. A computer cannot do anything that a human being cannot do!
2. The computer is much faster than humans.
3. The computer is more accurate than humans.

Computers Handling the Management of Medical Records

Now that I have described a number of settings for the use of computers and you have gained a grasp of what a computer is and how it works I would like to briefly discuss a topic which many physicians are becoming more and more interested in, that being, the computer storage of patients' medical records.

With the introduction and escalation in popularity of "home computers" many physicians have flirted with the idea of replacing or, at least, augmenting their paper files with the use of computerization. This of course has many advantages, covered earlier in the article. It does, however, carry with it a certain amount of work in the preparation and adjustment before the gains are fully realized.

Although it is possible to store a patient's medical record in the computer in its paper chart form, this would result in significant drawbacks. To understand these you must always keep in mind that computer programs, when written, should be as understandable and efficient as possible.

A first step is to minimize the amount of data being stored. Just as it would take someone a longer time to search sixty pages of the phone book versus six pages to look for all the phone numbers containing the digit six it would also take the computer a relatively longer time to search through a very large amount of information versus a smaller one. This could result in a difference of waiting minutes for a computer search of the information versus only seconds. Of course enough data must be stored so the computer can do the job it was intended for. But, storing pieces of information for "completeness" or "insurance" should be discouraged. The paper chart is a voluminous document. The information it contains, however, can be condensed to gain computer efficiency without compromising content.

Another step towards efficiency is found with regards to the use of synonyms. Imagine that you are a physician who wished to determine, with your computer, the patients that had had "chest pain." It is possible that you may not find all the patients you required. This is because some of them may have had their complaint listed as "angina." (Remember, the computer does only what it is instructed to do.) When you ask it

Glossary of Common Computer "Buzz" Words

Bug	(1) An error in a computer program. (2) A small microbe, many of which are sensitive to penicillin.
Buzz Word	Understood by most persons in a specific vocation but misapprehended by most of the general public.
Computer	A device capable of accepting data in the form of facts and figures, manipulating them in a prescribed way, and supplying the results of these processes.
Computer Language	The vocabulary and syntax of a set of symbols that are used to write the instructions for a computer.
Disk	An external storage device which uses flat, rotating, magnetically coated disks to encode data as polarized spots.
Down	(1) Term used to describe the computer when it is malfunctioning or inoperative. (2) The affect of a person dejected or discouraged.
External Storage	Storage media separate from the computer physically, but capable of accepting, retaining and sending information in a form understandable to the computer, such as magnetic tape or disk.
Field	(1) A unit of information within a record, such as a date or a name. (2) A place where the Meds Football Team won the UofT '78/79 Interfaculty Championship.
File	(1) A collection of records; an organized collection of information directed toward some purpose such as a patient medical record. One or more may be found in a file. (2) An instrument used by an "orthopod."
Hard Copy	Readable output from a computer that is generated in a storable form, such as paper.
Hardware	The mechanical, magnetic, electronic and electrical devices or components of the computer.
Input	The data presented into the computer for processing.
Interface	A common boundary between data processing systems or parts of a a system. A data tape created in one system and inputed into another is the interface between those two systems.
Internal Storage	Storage media which forms an integral physical part of the computer.
Output	The transfer or exit of processed information from a computer by means of a printer, video terminal or other output device.
Peripheral	Devices physically detached from the main computer but still electronically linked and controlled by it, such as disks, tapes, terminals and printers.
Program	Instructions coded in a computer language to perform a task.
Programmer	A person who writes computer programs. He is the one who should be held responsible for the satisfactory and efficient performance of the computer.
Record	A group of one or more fields containing related information about a common subject. One or more records make up a file.
Response Time	The elapsed time between the last entry or operation at a remote terminal and the first response by the central computer.
Soft Copy	Readable output of data that are displayed upon a video terminal or presented in some other transitory form.
Software	Various programs and programming aids supplied by the programmers and manufacturer to facilitate the user's operation of the computer.
System	An assembly of procedures, processes, methods, routines, techniques or equipment united by some form of regulated interaction to form an operational, organized whole.
Tape	(1) An external storage device which uses a continuous, flexible, magnetically coated ribbon to encode data as polarized spots. (2) That which lead to the downfall of Richard M. Nixon.
Terminal	A device for entering data into a computer by means of an attached typewriterlike keyboard and displaying data by means of a televisionlike screen or paper printer.
User	The person who is utilizing the computer - YOU!

to find all the patients with "chest pain" those are the only ones it will return. There are many ways to remedy this situation. One is by doing two searches — one for "chest pain" and the second for "angina." Another remedy is to create a synonym list which would be consulted by the computer every time a search was performed (eg. "chest pain" and "angina" searched for when only "chest pain" asked for). Both of these solutions involve inefficient utilization of the computer and therefore, should be discouraged. A final solution is to record information consistently and uniquely. By doing this only single searches are necessary to find all the appropriate patients.

I hope that it has become evident that a more concise and specific form other than the paper chart is necessary to record patient medical records. The shape that this will take is up to the needs of the individual physician and the capabilities of his computer. But always keep in mind that as the lengthiness and complexity of the information being stored increases, the computer's efficiency and your understanding will diminish. With the above discussion in mind a person must determine the following before computerizing:

1. What tasks he wishes the computer to do,
2. What information the computer will need,
3. Where this information is to be found, and
4. What the computer should do with the information to carry out the required task.

These determinations must be carried out clearly and completely before the first program is ever thought of. Remember to be patient, for in the early stages of planning and preparation thought will be far more productive than premature action.

Conclusion

This article has been far from all inclusive but, hopefully it as provided an adequate framework for further medical computerization knowledge.

In closing, the computer is a powerful tool that has the potential to be of great assistance in all fields of medicine!□

Your years at Medical School are the hardest. So how about some help along the way?

MEDICAL OFFICER TRAINING PLAN (MOTP).

A subsidization programme for medical students, known as the Canadian Forces Medical Officer Training Plan, has been approved by the Department of National Defense.

Provisions of the plan.

The Medical Officer Training Plan provides for:

- up to three years academic tuition;
- financial subsidization during your internship;
- monthly pay at 2nd Lieutenant rates for the first, second and third subsidized academic years, Pay during the final intern year is at Lieutenant rates, and upon obtaining your licence, at Captain rates;
- an annual allowance for the purchase of medical books and instruments;
- a substantial allowance for the initial purchase of uniforms;
- 30 days holiday each year, with pay;
- medical and dental care;
- other benefits and privileges of the Service and a commissioned status;
- a guaranteed position of respect and a good starting salary.

For more information, contact your nearest Canadian Forces Recruiting Centre, under Recruiting in the Yellow Pages or complete and return the coupon shown.

ASK US ABOUT YOU **THE CANADIAN ARMED FORCES**

Canadian Forces Recruiting Centre
4900 Yonge St. Suite 600
Toronto, Ontario M2N 6A4

I'm interested in hearing more about the Medical Officer Training Plan (MOTP)
Please send me information without obligation.

Name _____

Address _____

City _____ Prov. _____

Postal Code _____ Telephone _____

Acronymophobia

Anne Summers 8T2

I was quite young when my antipathy to acronyms first appeared. It probably stemmed from my confusion as to whether I was born in G.B., Eng. or the U.K.

Actually, apart from this isolated incident, had I not been born into a semi-military family, had philately not been a trend when I started school, had I not chosen to attend University and most important, had I not chosen medicine as a career, my affliction could have gone entirely unnoticed for the rest of my life. Unfortunately, as fate would have it, I have been assailed with geographic, military, scientific and medical short forms at different times since my earliest childhood.

My first big mistake (not including being born in the U.K., G.B., etc.) was to take up stamp collecting — the follies of youth. Of course by that time I had got the hang of the U.K. and its component parts, and U.S.A. and even U.A.R. I could master, but it took me years to figure out that CCCP meant the same as USSR (whatever that meant) and that both of them had something to do with Russia — those tricky devils. Anyway, by the time that I had managed to assimilate all of this information I was sick of sticking the stupid stamps in the stupid book so I gave the whole lot to my brother. Which brings me to phase three of my phobia.

My brother does not suffer from acronymophobia, in fact, due to some maniacal genetic engineer, he suffers from acronymomania. We have had some of the most fascinating conversations known to man. A series of unrelated letters upon his part would elicit such witty rejoinders as "What?" or, rarely, when being polite, "Pardon?" from me. In such manner, we would solve the mysteries of the Universe or so I believed. Things became worse when he joined the Sea Cadets. His acronymomania had been relatively mild until then but this encounter with the Military sent him (or was it me) over the edge. He could speak whole paragraphs without using a single word — he transformed the English language into alphabet soup. And if this wasn't enough, all of his friends seemed to acquire the same syndrome. For years I kept telling callers that nobody named Arge lived at our house. Finally somebody actually articulated the letters R.J. (guess who's initials).

In a desperately foolish attempt to escape my plight I ran away to University. Only too late I realized that I had jumped out of the frying pan into the fire — now, not only did I have the alphabet to contend with in every possible combination and permutation excluding actual words, of course, but I had entered a numbers game; I, 854323 of U.W.O. was to report to BIO 20 at 9:00 a.m. My God, it was diabolical.

Actually, despite my initial panic, I managed to master the more primitive acronyms and ignore the rest — missing only a few minor exams as a consequence. So, University went fairly smoothly with only minor relapses precipitated by chemistry (specifically, the Periodic Table) and biochemistry (non-specifically, every single term). In fact, things went so smoothly that I began to get overconfident. I was lulled into such a false sense of security that I applied to graduate school — to work on RNA Tumour Viruses, no less.

Once again I realized my mistake too late and this time there was no reprieve. And I was not working on any old RNA Tumour Virus, no, not I, I had masochistically chosen to concentrate on FV-SFFV. Not only couldn't I remember it, I couldn't even say it — a very embarassing problem at seminars. Apart from having problems with my research, I was also a social misfit. Oh, I could discuss O.C.I. with the best of them (although my mind did occasionally wander to the Six Million Dollar Man) but let anyone say P.M.H. and my thoughts would immediately jump to Pierre Trudeau (disregarding any inconsistency between P.M. and P.M.H., of course).

After two years of this Alice in Wonderland existence, I made my final escape, the most ill-chosen of all, into that haven of acronymomania — the University of Toronto Medical School. Little did I guess the troubles I would find here. In first year Anatomy they actually taught us acronyms by which to remember things — compound nightmare! Physiology and Pharmacology were horrendous, ACTH, LH, NA, CNS, PNS, CO, HR, TPR, and the dreaded LVEDP. Luckily, I had taken Histology in Graduate School and didn't have to contend with BFU-E, CFU-S et al. along with the rest of the alphabetic mutations — who knows what may have happened with that added stress.

Now after surviving all of this with faculties relatively intact, I may have met my Nemesis. In my naivete, I

(continued on page 126)

Book Review

Jeff Sloan 8T0

ABORTING AMERICA
by Nathanson, Bernard N. with Ostling, Richard N., Doubleday Company, Incorporated, Garden City, New York, 1979, 320 pp., hardcover $12.50

ABORTING AMERICA is one of the most significant documents on abortion to have come off the press since the famous U.S. Supreme Court Roe vs. Wade decision in 1973. It is significant for several reasons. Firstly, the author Dr. Bernard N. Nathanson, an American Obstetrician-Gynecologist is probably the world's leading authority on the medical aspects of abortion having performed some 1,500 abortions personally and presided over a further 60,000 abortions as former Director of a large abortion clinic in New York City. Secondly, his analysis of the controversy is firm and clear, as well as authoritative. He approaches it with facts as well as feeling, drawing from his immense wealth of practical experience and self declared atheistic-humanistic perspective. Thirdly, his conclusion:

a) that abortion is a moral and ethical issue of the highest order and

b) that abortions should be performed only under very limited conditions both represent a complete reversal of his former stance and stand. This is in direct opposition to the liberal abortion climate that exists today.

The book begins with an autobiographical sketch in which he describes the influence of his patriarchal obstetrician father which led to his entry into the McGill University Medical School in 1945. It is highlighted by the story of his own girlfriend's pregnancy followed by their frantic search for an abortionist in the pre-liberal era. He goes on to describe the situations he experienced as a resident and during the early days of his private practice that brought him to see the gross hypocrisy of the abortion situation. He then became quite intimately involved in the infant pro-abortion movement in the late 1960's as a personal response to the hypocrisy that he perceived.

A considerable portion of the first half of the book is devoted to a detailed (and somewhat boring) account of the beginnings of N.A.R.A.L. (National Association for the Repeal of Abortion Laws), his involvement in it, and the influence that this group had in bringing about the unprecedented New York State Abortion Statute in April 1970. This Statute basically, made abortion "on demand" a reality in that State for any woman up to 24 weeks of pregnancy. He further gives an account of his acceptance of and the events occuring during directorship of the Centre for Reproductive and Sexual Health (C.R.A.S.H.), a huge New York City abortion clinic that was set up to process the enormous number of women that converged on the city seeking abortions following the passing of the Statute.

However, during the last part of his 19 month tenure at the centre, Nathanson began to experience vague gut feelings of distaste towards the idea of abortion. These seeds continued to grow as he left the centre and started new work in perinatology. As the doubts began to crystallize, he publicized them in a letter which was entitled "Deeper into Abortion" (New England Journal of Medicine, November 28, 1974). In it he expressed his deepening conviction that he had presided over 60,000 deaths as Director of C.R.A.S.H., and he called the medical world to take a second look at the abortion issue.

Having thus introduced himself and laid down the context of his thesis, Nathanson quickly proceeds. In two chapters he meticulously dissects and critiques virtually all of the standard arguments for and against abortion, exposing and challenging their oftimes flimsy or even deceptive foundations.

He then puts forth his own very convincing argument (again appealing to his great depth of experience and knowledge as an obstetrician-Perinatologist) — "human life" begins at the time of implantation i.e., just shortly after conception. The implications of this, says Nathanson, are earth-shaking and he now believes the fetus (which he calls "alpha") deserves every protection given to other human beings.

He finally turns to the "Golden Rule," concluding that abortion is justified only when pregnancy represents a serious and genuine threat to the life or life expectancy of the woman, having previously

(continued on page 126)

We are proud to announce the publication of Two New Important Text/Reference books from the University of Toronto Faculty of Medicine.

RESERVE YOUR COPY OF THESE TWO IMPORTANT BOOKS NOW!

A Method of Psychiatry

edited by **Greben, Pos, Rakoff, Bonkalo, Lowy, and Voineskos** with 34 contributors

This book has been written specifically for the needs of the University of Toronto's Department of Psychiatry, in consultation with other Departments of Psychiatry across the country, therefore, it will have text appeal everywhere.

It is written by the foremost authorities in the field of Canadian psychiatry.

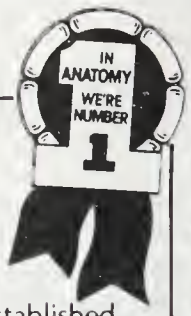
"This book is primarily presented for the medical student, and for all physicians who do not specialize in psychiatry. It is also hoped that it will be of value to members of other professions who handle these same patients, certainly including nurses, psychologists and social workers."

—from the Preface

Contents:

Preface / Acknowledgments / The Patient and The Physician / Infancy and Childhood / Adolescence and Young Adulthood / Middle Age and Maturity / Life Events and Illness / Biology, Behavior and Mental Functioning / Being with the Patient / The Examination: History / The Examination: Mental State / The Examination: Physical and Special Investigations / The Examination: Psychological Testing / The Examination: Formulation / Common Psychiatric Disorders: Introduction / Anxiety and Anxiety Related Disorders / Dissociative Disorders and Depersonalization / Somatization, Conversion and Hypochondriasis / Psychosomatic Mechanisms / Psychosomatic Disorders / Pain / Sleep Disorders / Affective Disorders / Paranoid Disorders / Schizophrenic Disorders / Personality Disorders / Disorders of Sexual Behavior / Drug Use Disorders / Organic Disorders (Intracerebral) / Organic Disorders (Extracerebral) / Childhood and Adolescent Disorders / Psychiatric Emergencies / Suicide and Attempted Suicide / Treatment: General / Treatment: Intensive Psychotherapy & Behavior Therapy / Treatment: Somatic / Treatment: Hospital / Treatment: Social-Environmental / Difficult Challenges in Medical Practice / Referral to the Psychiatrist / Legal Issues / Mental Retardation / Glossary

Summer 1980 (in time for your September courses)
ISBN 0-8121-0710-1/approx. 300 pp/illus/approx. $24.95
Lea & Febiger



CLINICALLY ORIENTED ANATOMY

by **Keith L. Moore**, Professor and Chairman, Department of Anatomy

"In this new textbook the achievement of the established aims have been carried out in the following manner.

Firstly — the meaning of the majority of the Latin and Greek terms has been carefully explained so that the student can relate the words to the structures they describe. This leads to "understanding" rather than "memorization."

Secondly — keeping in mind that a good illustration is worth a thousand words, Dr. Moore was most fortunate in being able to use the majority of the very accurate illustrations from the ***Atlas of Anatomy*** produced by the late Professor J. C. B. Grant. The chapters in this book and those in the Atlas are keyed in the same manner making cross-reference easy. Further anatomical illustration is provided by the provision of a large number of radiographs illustrating both normal and abnormal radiographic anatomy. These have been carefully selected. The author has also included numerous photographs and line drawings which will prove valuable in the clinical examination of patients.

Thirdly — in order to stimulate students to learn, a large number of clinically oriented cases have been placed at the end of each chapter, followed by comments on the anatomy involved in each case. **Learning is more than mere teaching.** It includes questioning, correlation, and justification. The author has attempted to make this book a learning tool by including in each chapter many clinically oriented comments and patient oriented problems. The clinical comments and problems of patients are at a level that is suitable for beginning medical students who will probably have similar questions and problems, or will be asked similar questions and posed with similar problems by their friends and relatives. We know of no other text in which this type of anatomy teaching has been carried out to this extent . . . Dr. Moore has produced a textbook with a revolutionary new approach to anatomic teaching which we feel sure will be appreciated by the students, and teachers alike."

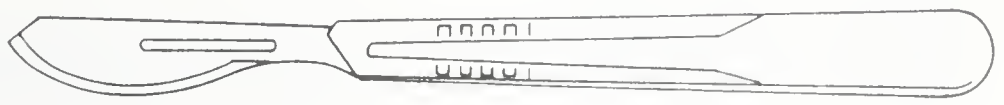
—From the Foreword by J.W.A. Duckworth, MB, Ch.B, MD, Professor Emeritus of Anatomy, Former Chairman Department of Pathology, University of Toronto and D. L. McRae, MD, FRCP(C), FACR, Professor Emeritus of Radiology, University of Toronto

May 1980/950 pp/1200 illus/ISBN 0683-06146-1/approx. $30.50 Williams & Wilkins

WILL BE AVAILABLE AT YOUR MEDICAL BOOKSTORE

Medical Division
Macmillan of Canada
A Canadian Company

Ask for a complete list of our Medical and Health Science books.



Socialized Medicine

Viewpoint:

It seems to be the general opinion that any member of the medical profession who chooses not to work under a system of socialized medicine (or semi-socialized medicine, such as OHIP) is greedy; that doctors earn more than enough to make ends meet without opting out or moving South. This point of view is hard to dispute. An article in this Journal (Nov., 1979) showed that increases in doctors' salaries have fallen behind the Consumer Price Index by about 30%. Nevertheless, doctors can, by no stretch of the imagination, complain of being starved to death.

However, in this whole attitude a very important point has been overlooked — that in a non-idealistic, non-spiritualistic society in which the most important measure of one's worth is one's salary, doctors' salaries are being limited by popular approval. This would indicate that, by social standards, the medical profession is of limited worth and it follows that, being of limited worth, the withdrawal of individual members should excite no notice.

This is where we find the contradiction. Theoretically, the media shouldn't notice that doctors are opting out. But they do, quite vocally; trade unions should be indifferent to the fact that doctors are quitting. Yet this is of so little importance to them that they threaten to boycott those individuals that do; and, the man in the street should be oblivious to the whole problem, but he complains fiercely of being cheated by greedy doctors.

The question that arises is, how did this contradiction come about? How can something of so little worth be so sought after? The answer is moral blackmail. It is known that the medical profession performs a vital service, and that the withdrawal of that service could cost a number of lives, but it is also known that doctors are morally bound to provide that service. This knowledge is used as a basis for limiting their economic freedom. This may sound a little Machiavellian, but it all boils down to a very common practice, i.e. the attempt to get something for nothing.

It may be argued that the moral dilemma as far as socialized medicine is concerned, is not how much the doctor gets paid, but the creation of accessibility of care for the patient. It is assumed that if socialized medicine were discontinued, all of the ailing poor would die in the gutter. I think that this gives very little credit to the medical profession — doctors who would actually refuse care to patients who couldn't pay are probably in a very small minority, especially as this attitude is not only frowned upon by the CMA and the OMA, but is against the Hippocratic Oath and is illegal in Canada. It is also rather insulting that Canadians who are so quick to dissociate themselves from all things American, assume that as soon as Canadian doctors are given their 'freedom', they would immediately turn into carbon copies of their American counterparts, who have been known to refuse treatment to poverty-striken patients.

Now that I have stated my moral objections to socialized medicine (including our modified system in Ontario), I must say that I can't think of any alternative which would involve no risk to any of the parties involved. So as patients are the majority, and doctors are the minority, I expect that the system will continue despite all protests on the medical side. Finally, I think that it should be made very clear that access to health care, which everyone living under this type of health system considers to be a right, infringes upon the rights of doctors and therefore, not a right but a privilege. □

Anne Summers 8T2

Legal and Financial Liability of Medical Students and Interns

John Burnes
(John Burnes is a second year law student)

There is not a malpractice crisis in Canada of American proportions. Nevertheless important questions regarding malpractice actions have been examined by the judiciary and by associations or individuals concerned about our health care delivery system. There is no doubt that these questions are pertinent to medical students, first, because some questions are confined to the students' responsibilities and, second, because the students will soon enough hold the responsibilities of all doctors. These students will certainly prefer to learn of their liability from others' experiences rather than from personal encounters in a court action.

This essay will examine the manner in which the law affects medical students (whether they are in the initial years of the medical school program, clerks in their last year before graduation, or as interns) while involved in health care areas. This essay, therefore, intends to evaluate the liabilities and responsibilities of students and interns. Further, it will be suggested that the best way to avoid a malpractice suit or other disciplinary action is to understand one's responsibilities and practice "preventative medicine." Thus, the essay is not a primer on how to conduct a legal action nor should it be used to predict the outcome of a malpractice suit. For those inquiries it is best to quickly obtain experienced legal advice. This essay has a more basic intent: to examine written advice, the cases, statutes and insurance coverage to derive basic rules on how to avoid litigation and financial loss.

It is apparent that medical clerks and interns work exhaustively long hours. Working round-the-clock shifts and being wakened repeatedly through the night, it is a wonder that they remember their medical procedures - let alone any advice on how to prevent negligence action. Somehow doctors of all seniority do their work well. There were 16,000 doctors licensed in Ontario in 1978 and, yet, there were only 600 complaints to The College of Physicians and Surgeons of Ontario and more than half of these were resolved without even a hearing or reprimand. The Canadian Medical Protective Association (CMPA: to which 80 percent of Canada's doctors belong) had 32,175 members in 1978. However there were only 323 new suits launched against a total of 489 members. And, during 1978 out of 263 lawsuits concluded, in only 81 cases were court awards or settlements made. These very few actions were brought despite approximately 2 million operations and 40 million beddays during the year. These are not statistics of an error prone profession.

However no doctor or student knows if he will avoid personal involvement. In a profession which must operate under the exigency of so many unsolved diseases and unpredictable results, success is not guaranteed and dissatisfied patients sometimes resort to legal action. The doctor quite understandably wishes to avoid such suits because of the concommitant expenditure of time, money and anxiety. Even more, so many doctors consider just the instigation of a suit to be a reflection on their abilities.

Students should not take each suit as a personal affront. Mr. Justice Haines has explained, "With twenty-twenty vision (the lawyer) seizes on the unfortunate result, second guesses the doctor and charges him with fault, although at the time of the treatment the symptoms and the various tests presented a very foggy picture and resulted in complex differential diagnosis." Nor must the student obtain legal advice after any lack of success: "Every malpractice suit starts with a bad medical result, but every bad medical result does not mean there has been medical malpractice. In fact, the greater part of bad medical results occurs despite the best of care."

The Supreme Court of Canada has provided a very complete analysis of the medical practitioner's responsibilities:

> Certainly doctors should not be held responsible for unforseeable accidents which may occur in the normal course of the exercise of their profession. Cases occur in which, in spite of exercising the greatest caution, accidents supervene and for which nobody can be held responsible. The doctor is not a guarantor of the operation which he performs or the attention he gives. If he

> displays normal knowledge, if he gives the medical care which a competent doctor would give under identical conditions, if he prepares his patient before the operation according to the rules of the art, it is difficult to sue him in damages, if by chance an accident occurs. Perfection is a standard required by law no more for a doctor than for other professional(s)...

Note the court's advice. The following sections will examine what is the standard of care, caution, and preparation which would apply to students and interns.

Ethical Considerations

Every student should read the *Code of Ethics* approved by the Canadian Medical Association and the Council of the College of Physicians and Surgeons of Ontario in 1970. It is not binding by law (although this essay explores, below, how some of the Code is incorporated into law) nor does it specifically apply to students; however, those are hardly reasons for not adhering to its standards.

The important advice for the inexperienced, but ethical, is to:

(i) "continue his education to improve his standard of medical care;"

(ii) "recognize your limitations and the special skills of others in the prevention and treatment of disease" and therefore "request the opinions of an appropriate confrere acceptable to the patient when diagnosis or treatment is difficult or obscure, or when the patient requests it;"

(iii) "keep in confidence information derived from his patient, or from a collegue, regarding a patient and divulge it only with the permission of the patient except when the law requires him to do so;"

(iv) "conduct himself beyond reproach and... report to the appropriate body of his peers, conduct by a confrere, which he considers unbecoming to the profession;"

In addition, the last extract is worth discussing in any medical jurisprudence course or amongst one's medical friends. Should a medical student or intern—who observes so many procedures—report what they consider questionable practice? Do they know enough to judge? While the primary legal obligation is on the chief of staff of the hospital, he or she cannot observe everything. Thus I would expect irrefutable occasions may occur when even a student or intern can intelligently realize conduct is improper or instructions erroneous. I believe the ethics dictate that the student or intern consult with an appropriate individual — perhaps even the doctor who is in question.

Avoiding Liability

Communication

Some think the current medical students should stop being "duds"! At least that is what a retired member of the University of Toronto Senate has opined: "I believe marks are still the key at Toronto and that is the reason they turn out so many duds." Should this advice be ignored? No. As Dr. W. Gifford Jones explains in his *Toronto Globe and Mail* column, "This man drove home an important point about doctors. He believes educators should realize there is more to being a doctor than having the right intelligence quotient. There is also an attitude quotient, an emotional quotient and an empathy quotient. It is this mixture that prevents inadequate or indifferent communication." There is no reason why doctors should not listen and respond to their patients and there is very much to gain by doing so. Why is communication so important? Because it is the major factor by which practitioners can avoid malpractice suits - and thus avoid liability!

The important lesson here is that the impersonal hospital setting can be alleviated by a proper attitude of students. Even more so, the student should attempt to resolve them. In this way the students may well protect the hospital and doctors, as well as themselves, from unnecessary litigation.

Permitted duties for students

Assuming that students want neither themselves nor their supervising doctor or hospital to face a liability suit, it is important that students and interns, in Ontario, adhere to the guidelines, "Warning Notices" and "Special Notices" which are published regularly by The Council of the College of Physicians and Surgeons of Ontario. Since the College sets regulations and handles initial disciplinary hearings and has a wide range of penalties which it can impose on licensed doctors, it would be wise to follow these procedures.

The important warnings are:

(i) "A hospital that has medical students working as externs, clinical clerks or summer interns should designate a member of the Medical Staff to be "Student Co-ordinator" who will be responsible for the overall student program including *services to be permitted* and the *supervision* and training to be provided."

(ii) "Any documentation of histories or physical examinations prepared by a student should be reviewed and countersigned by the patient's attending physician or by a registered intern or resident who is responsible for the care of the patient."

(iii) "Any 'orders' written by the student are to be countersigned by the licensed physician."

(iv) After a proper period of instuction and experience "remote supervision" may suffice for certain "routine technical procedures."

(v) "*Appropriate liability insurance for the hospital and the student be secured by the hospital* to protect the student and supervising physician as well as the hospital."

Ignorance of the law is no excuse in Canadian courts. Quite possibly courts will say ignorance or noncompliance with these guidelines is no excuse. To protect themselves students should ensure that these guidelines are known. If they are not followed, students should ask why not.

It appears that medical students (at least those from the University of Toronto) adhere to these guidelines. Interviews reveal that both in the hospitals and on elective activities (such as third year involvement at the Alexandra Park Health Clinic) students will interview and record histories and conclusions but such reports will be reviewed and the patient re-examined by the attending

doctor before the doctor signs the report or makes any prescription.

Legal Liabilities

There are many types of liability: criminal, tort, contract and breaches of particular Ontario statutes or regulations dealing with health practices.

The scope of this essay excludes certain of these liabilities from being considered in any detail. This essay will not examine any breach of professional conduct or criminal laws which relate to sexual impropriety, drug offences or other quasi-criminal matters. Such standards are more truly binding on all of society and not peculiar to a single profession.

One point should be made about contract liability. Interns, more often than students, may be asked by patients if they guarantee some result or success. A doctor should not guarantee results when there are so many unpredictable variables! The Supreme Court of Canada concurs that doctors cannot guarantee results. An intern should only explain the possibilities in realistic terms and state that the work will be the best of which he or she is capable. (Students should let any assurances be done by a licensed physician.) The seriousness of not following this advice is obvious. Any guarantee would establish a contract. With any deviation from the guarantee — even if there was no negligence and even if the guaranteed result was next to impossible — the doctor would be liable to pay damages for breach of contract.

The rest of this section will deal with common law (tort) liabilities and then with the statutory liabilities.

Tort law

The first principle of tort law which would affect students in negligence. Not every incident of negligence leads to liability. For liability due to negligence to be imposed, there are four requirements:

(i) the defendant must owe the plaintiff a duty to exercise care;

(ii) the defendant must breach the standard which the law establishes for his conduct (it is a breach even if it was completely unintentional!);

(iii) the plaintiff must suffer loss as a result of the breach; and

(iv) the substandard care must be the cause of the plaintiff's loss.

A defendant owes a duty of care whenever he or she begins or is obligated to begin treatment. This duty of care re-emphasizes the Code of Ethics already cited and is substantiated by the firm advice of the CMPA: "Do only the work for which you are trained; refer work you cannot or should not do to someone who can."

The advice, I propose, is equally clear to students and interns. They cannot expect that just so long as they use their best efforts that they will not be liable, nor can they expect to plead an innocent lack of knowledge. Medical treatment cannot condone an unprofessional standard or experiments. Students or interns can act when supervisors will protect their attempts from falling short of the standard but if a student is not trained or experienced enough to act competently even with supervisors they must not act. That is when they refer. The cases further accentuate this warning.

Duty to Refer

There are many precedents to indicate that a court would consider a student or intern more inexperienced than a doctor and consequently that the court would place a heavier duty to refer on such student or intern.

Current Standards

A doctor cannot be safe simply by following a procedure which is similar to that of his peers. This warning has been re-emphasized by the Supreme Court holding that an obsolete method does not meet the standard of care.

Precautions

The courts have been quite willing to construct a standard of care which uses precautions as logical to a layman as to a doctor. The above features of the standard of care — referring cases when in doubt and using current and proper procedures — are so elementary as safeguards that they would have to apply to interns and students no matter how inexperienced the individuals were.

Causal link to the loss

Not always will negligence cause an injury. Students should take this to heart; even if they make an original error they can still redeem themselves if they obtain proper treatment before any damage ensues. At the least, students should act to minimize any damage from earlier negligence.

In a similar sense, if a student shows the intelligence and caution to refer to a doctor when there is a lack of knowledge, the student or intern cannot be faulted. If the student does not show such care he or she will be subject to a Supreme Court distinction which has been used on more than one occasion: "An error in judgment has long been distinguished from an act of unskilfulness or carelessness or due to a lack of knowledge."

What standard of care has been advocated for students?

Professor Picard suggests that medical undergraduate students will likely have a standard of care analogous to that of doctors and housestaff. The major qualification is that students should exercise caution against their own inexperiences. The same conclusion was arrived at by a major English authority, Professor Speller. He concludes that a student who "acts carelessly, or attempts something beyond his competence, thus causing harm to a patient, does so at his peril."

Therefore a student, who is the highest risk of anyone claiming to use medical skills, must beware of every limitation and exercise the greatest of care.

Medical students should beware that courts do not expect them to resolve all crisis, they primarily expect an emphasis on caution.

Hospital Liability

A Canadian case explains how a student can be sued jointly with a hospital. A final year medical student was regularly doing procedures without, apparently, any supervision. In one tragic incident an injection was supposed to be done in the vicinity of the heart; instead, the needle pierced the heart, the patient died, and the estate sued for negligence. The hospital settled the case out of court for over $100,000 which would confirm they were unable to defend because of the lack of supervision. If the supervision had been provided the liability quite likely would not have existed.

Many cases poignantly prove that if students refused to attempt procedures for which they have no training experience or supervision, then students would spare hospitals from paying damages for the hospital's negligent supervision.

Liability due to Statutory Requirements

Interns particularly, but also students, are affected by particular statutes and resulting regulations.

Interns

Because they are no longer "students," interns must be licensed to practice medicine in the hospital. Interns only qualify for a restricted license from the College entitled an "Educational License." This license stipulates that an intern may not receive remuneration other than a regular salary, that prescriptions are only allowed to be written for hospital patients and an intern could assist in a doctor's office only if it is under adequate supervision and if it is associated with the teaching practice.

The comprehensive definition to the term "professional misconduct" is set out in the *Code of Ethics*. I list just a few of the proscriptions to show how important it is to follow the rules derived from the cases. Professional misconduct includes:

(i) failing to abide by the limitations of one's licence;

(ii) failing to keep the required records;

(iii) failing to maintain the standard of practice of the profession;

(iv) releasing patients' information unless required to do so by law; and

(v) permitting or assisting a person not licensed (in other words, a student) to engage in the practice of medicine except as provided for in the *Health Disciplines Act*.

Practising Medicine

Students should beware that the allowance of the *Health Disciplines Act*, to practice medicine is only valid so long as the student is "engaging in a curriculum of studies at a medical school in a university of Ontario." This implies that if a student engaged in practising medicine which was not part of the curriculum — such as a summer job, or if a student acted in the hospital contrary to the guidelines or contrary to the specific school structure—the saving clause may not apply. Therefore a student may not do away from school what he was legally allowed to do while officially engaged in school work.

Will a summer job prior to clerking be a violation? It is imperative that the student have it designated as part of the curriculum if there will be any acts of practising medicine in the form of treatment, diagnosis, or other assistance in a doctor's duties.

Consent

· Not only must the patient give explicit consent to medical procedures but the patient must also be aware of what their consent entailed.

In an early American case a number of medical students insisted on examining a female patient and laughed when she objected. The hospital was considered liable for allowing students to act without consent.

A misunderstanding about what had been consented to was revealed in a recent complaint to the *Globe and Mail* column, "The Consumer Game." The patient stated:

> They had a student attempt to put me under and, after three failed tries, the anesthetist had to put the tube on my other hand. This fumbling around and being punctured three times really upset me so that I was on the table crying by the time the anesthestist got around to doing it correctly.
>
> I feel this is wrong and that a patient should be asked for permission to allow students to practice in the operating room. It was a very unnerving experience.

How valid is this complaint? In Buffalo, New York, students are required to personally introduce themselves and ask permission from the patient in order to even watch an operation at one hospital. Indeed, in Ontario it is a legal requirement that consent be obtained before every operation to authorize the procedure unless there is an emergency. Without the consent there could be a charge of battery.

Patient Records

There is an obligation on the hospital, under the *Public Hospitals Act* and on the doctor as part of the definition of professional conduct to provide proper records. The regulations outline the required information including a medical, history, physical examination and provisional diagnosis. Those are all part of a clerk's possible duties and it could not harm if students were to insure that the hospital meets its statutory requirements.

The requirement of proper records could take on very special importance.

Financial Protection

In essence, medical students and interns have few worries. While they may not avoid the stigma of the law suit, they should avoid any financial concerns.

Medical students have the fewest of these few worries. The Canadian Association of Interns and Residents has just reviewed the potential for clinical clerkship malpractice litigation and clinical clerkship legal coverage. Although the findings have not yet been released Ms. Lois Ross, the Executive Director of the Association, has explained that because of the required insurance and supervision it appears that clerks are adequately covered.

Medical students, like all students, are covered under a general insurance so long as they are acting as students in the learning process. But the coverage assumes that they are acting under proper instruction.

The university makes it clear to the hospitals that if supervision is not provided or if improper instructions are given then that will be a matter for the hospital insurance coverage. Hospitals insurance does cover such events.

If students are choosing to take an elective away from Toronto, Insurance Services will write to the hospital involved and explain that the University will provide insurance coverage but only so long as the hospital maintains its onus of supervision. Some states do require additional insurance which will be determined before the student embarks.

Interns have a few more concerns. All the Toronto Teaching Hospitals

explain that interns are covered under the general liability insurance for the duties they perform. Some hospitals did admit that an intern might want extra insurance for personal reasons, particularly since the hospital coverage would not apply for appearances before the Discipline Committee.

Students and interns should confirm from the hospital that their coverage is complete. Case law does not suggest any problem for interns or students in the past. Interns should also confirm that they will be covered if they act in a doctor's office that is part of a teaching practice. CMPA has warned that the major time they will not financially protect a doctor's vicarious liability is when the doctor is vicariously liable for the action of another doctor (such as an intern) who could have obtained his or her own CMPA coverage.

Conclusion

This essay has intended to prove that there is much more to concern students and interns than just financial protection in the event of a lawsuit. Insurance coverage or a successful defence does not compensate for the ethical or legal stigma, the wasted time, the effect on the individual's reputation, or the increasing insurance rates that must be paid when the number of dissatisfied patients increase.

The above sections show there are many ways for students to protect themselves, the doctors and the hospitals. When a hospital is lax in rules or supervision, students can guard against breaching the College guidelines. Students can develop good notes, learn to consult, communicate with the patients, insist on supervision, and determine that consent is knowledgably given. This essay should both alleviate students concern of the danger of liability and also show how valuable students can be, despite their position in the medical hierarchy, in preventing liability suits. □

Extensive references are available upon request.

THE U. OF T.
MEDICAL BOOKSTORE

FREE SPECIAL ORDER SERVICE
FREE OUT OF PRINT SEARCH SERVICE
FREE CATALOGUE - OVER 2000 TITLES LISTED
DOCTOR'S BAGS, STETHOSCOPES, ETC.

63A ST. GEORGE ST.
978-6161

OPEN SAT. 11 am - 5 pm
SEPT. - APR.

Writing Contest

The Medical Alumni Association sponsored the annual Arts and Letters writing contest. The entries were judged by Timothy Findley, the Writer-in-residence of the University of Toronto. This year, the winner in the prose category was Tony Drohomyrecky (8T2) for his short story *"Sharon"*. Mr. Findley remarked: *"Sharon has all the necessary ingredients for a good read. The story has tension, pacing and cohesion. Very, very well done, and I congratulate Mr. Drohomyrecky."*

In poetry, the co-winners were *"Winter"* by Catherine Flowitt (8T1) and *"Curried Favour"* by Rob Hegele(8T1). Mr. Findley commented: *"I couldn't ignore either of these poems - and I find them equally good. "Winter" is poetry of a more traditional kind - and also very well managed. As with all good writing, there is a clean line to follow and the imagery is consistent with a single mood and doesn't waver at the edges. Mr. Hegele has a vicious sense of humour, the best sort of humour for poetry, because poetry needs bite and concision. And the poem says something original and says it well."*

The Arts and Letters Society thanks all those who entered.

SHARON

Sharon lacked nothing. She was a pretty, intelligent blonde with a personality that made her an instant success with everyone that she came into contact with. She was well-liked in her third year university classes by colleagues and professors and on her varsity basketball team she excelled despite being a demure 5'6". Life at home with her parents and younger brother was reasonably peaceful, and if anything, perhaps a little on the dull side for her taste. Mr. Raymond Nash, her father, was a lawyer with a large practice and Mrs. Helen Nash, her mother worked as a teaching assistant at the nearby Long Island University, New York. Their home was a comfortable, split-level duplex on ½ acre of land, just overlooking a stretch of scenic Atlantic surf. Indeed her life was running a storybook course that would almost certainly result in unlimited success and fulfillment. This however, was not to be.

When the summer of that arrived, Sharon received a letter from a close friend of hers who had since moved out to California. In the letter, her friend Karen begged that Sharon spend at least two weeks with her, vacationing and enjoying the sites, sounds and people of crazy California. This was an offer that few could refuse and Sharon was no exception. She saved $300 of her own and her parents added another $300 to assist her in her vacation plans. She spent countless hours packing and pondering which bathing suits would be best, what evening dresses would suffice and what sorts of gifts to take along.

Soon it was time for Sharon to leave for her grand trip and her brother and parents saw her off at New York's Kennedy Airport, where she boarded Pan American flight 422 which would take her to O'Hare Airport in Chicago, from whence she would board another Pan Am jet to San Francisco. A final transfer would take her to San Diego and to her friend Karen.

Her flight to Chicago was uneventful except that the lady across from her became airsick twice and on both occasions Sharon helped her to the bathroom, for which she received profuse thanks and an invitation to visit the lady's home in Chicago if Sharon ever had such an opportunity.

The San Francisco-bound flight left at 1 p.m. Chicago time and arrived four hours later at 3 p.m. Pacific Standard Time at 'Frisco International Airport. From here she would have to board PSA Airlines flight 70, San Diego bound at 8 p.m. California time, so Sharon could safely kill four hours in San Francisco before coming back for her flight. Her luggage was all being handled automatically by the airlines so that she would be free to wander about without burden. Her first step was to go to an information booth and obtain a high-light brochure for the city. Then she could assess what might reasonably be done in her brief period of stop-over. She spotted a vacant chair in the Delta Airlines waiting terminal and sunk into it comfortably to browse. "Hmm, Fisherman's Wharf, Chinatown, Cablecars...Wow, there's so much to see and do" she thought to herself. Twenty minutes had

passed and still no decisions were made. At about this time, most of the Delta passengers got up and headed towards the baggage-check area, leaving her as the only one seated. A few moments later, unbeknown to her, two young people, a girl of around twenty and a young man of perhaps eighteen sat down in the seats next to her. "Hi!" chirped the girl.

Sharon was a bit startled since she hadn't noticed them the first time but regained enough composure to reply "Well hello to you too!"

The young man introduced himself to her as Phil and the young girl as Jenny. Sharon paused for a brief moment and surveyed these two perky young strangers. Phil was slim and short with long black hair and a broad, friendly smile, while Jenny was a tall, slim brunette with a pleasant visage.

"Are you waiting for someone or are you waiting for a plane?" enquired Jenny.

"I'm just waiting for a flight. It isn't until eight tonight though."

"Eight! exclaimed Phil, "Geez, they sure make people wait around long enough don't they!"

"Well, I don't mind really," explained Sharon, "I'm just trying to think of an interesting place to see for a few hours, like Chinatown for instance."

"Chinatown is just great during the summer months! In fact, Phil and I were considering a little window-shopping down there this aft'. Would you be interested, umm, sorry, I didn't catch your name..."

"Sharon" she replied.

Such a show of in-town hospitality was not expected and Sharon had been taken by surprise and mild suspicion, but these two young people were very pleasant and appeared to be your typical, above-reproach "All American" kids. And so, Sharon was perhaps a little less hesitant than maybe would have been prudent.

"Yes, that would be really nice. Thanks!" Sharon replied with a smile.

"Great!" exclaimed Phil. "It's about a fifteen minute drive from here, but the way I drive, maybe ten minutes!"

Jenny laughed loudly and Sharon chuckled as well, being put a little more at ease with the two.

"This way ladies!" said Phil with a sweeping bow in the direction of the parking lot. The three of them headed outside into the parking lot and the warm sunshine, walking and casually chatting. What Sharon had not been cognizant of was that she had just agred to spend the afternoon with two members of the infamous, California-based cult, called the Church of Life*, better known as "the Dories"*.

The Church of Life is a rapidly growing cult led by a self-appointed "Messiah" known as Reverand John Dorey. The cult is based largely on youthful followers who had been cunningly and subtly "programmed" to become the tools of action for Rev. Dorey. They are totally dedicated to him and his teachings in his book, "Instructions for Life", which is the cult's "bible". In his teaching, he tells his followers that "I will do your thinking" and "If I tell you to fly, you will." Young and vigorous people are his target since they are better able to attract more followers and to raise funds tirelessly. In return for their dedication, he gives them an authoritative figurehead and the security of a tight group—never having to think for themselves.

Phil was right. It only took them ten minutes to get to Chinatown. The three of them spent the afternoon enjoying the sounds, the sun and their own company. As supper-time approached, Jenny suggested that they head over to "the Homestead" for a bit to eat and then, they'd drive Sharon back to the airport in plenty of time to catch her flight. Sharon did not refuse their generous hospitality and so they left Chinatown to head for downtown 'Frisco. Fifteen minutes later, Phil pulled up to a large pleasant-looking, two-storey house that Jenny had alluded to earlier as "the Homestead". They were met at the door by a bouncey pig-tailed young girl who immediately turned to Sharon, welcoming her lavishly and beckonning her to come in. Inside, were nearly two dozen young people seated on chairs, chesterfields and the floor, all busily chattering enthusiastically and munching on stew. Jenny introduced Sharon to the gathering who received her warmly and she sat down on a pillow beside another girl. No sooner had she sat down when she was presented with a heaping bowl of the same stew and crusty roll. "The stew was kind of bland—vegetable and potato, but it was still a nice gesture" mused Sharon to herself. The people were talking about some sort of a big project that they were working on. Enthusiasm was high as one girl was describing the "project" and how young people today could really fend for themselves in a society where adults seemed to shun their innate abilities. The picture that was painted before Sharon was of an idealistic sort of a young people's farm where companionship and cooperation were stressed. It sounded interesting and Sharon asked several questions about it.

"Hmm, these kids have something kinda special here" she thought to herself.

The time passed quickly and Sharon watched her time carefully and listened intently with great interest. When it was time for her to leave, one of the young men, Dave suggested, "Say Sharon, would you be at all interested in joining us on this project for the weekend? It would give you some real insight!"

"Gee, I'm sorry, I wish I could but my plane leaves in an hour-and-a half."

"Well that ticket of yours is good any time. Is someone expecting you to come today?"

"Yeah, my friend."

"Why don't you give her a call and tell her that you'll be there on Monday. You can use our phone—no charge!"

Sharon thought about it for a minute and said, "Well, I'll try to get that arranged with Karen, but no guarantees." She was shown the telephone and dialed her friend long distance, explaining vaguely the circumstances to Karen. So it was all set, that Sharon would catch the flight on Monday.

She re-entered the living room and said, "My baggage! It's still at the airport!"

"No problem," said Phil, leaping to his feet and pulling out a jangling set of car keys. Sharon and Phil went to the airport to retrieve her luggage before it was to be loaded onto the PSA flight. When they arrived back at the "Homestead", many of the young people were getting

*denotes a purely fictional organization

packed and piling into a large van situated just outside the house. Jenny suggested that Sharon take all of the essentials in a smaller suitcase since they would be heading out to the farm for only two nights. Sharon packed her pyjamas, toothbrush, blue jeans and a few large shirts that she was fond of. Her suitcase was carried for her in a gentlemanly fashion by Dave and she climbed into the back of the van with ten others. Dusk was falling by this time as the van pulled out from in front of the "homestead" and headed towards the freeway.

"Where abouts are we headed?" she asked.

"The project site is around sixty or so miles to the southeast of here" replied Dave.

The drive took around an hour of freeway time and twenty minutes of backroads, mostly unpaved, before the destination had been reached. The kids piled out of the van eagerly into the cool night and Sharon followed. She was instructed to bunk down in a barracks-like hut which bore the designation, "Gals only", while boys made their way across the field to a similar hut.

Once inside, the girls were welcomed by another dozen girls who had arrived earlier. Sharon was shown to a cot in the center of the large bunk-room, beside a red-headed girl Gloria, who introduced herself and showed Sharon the remaining facilities. After brushing her teeth, Sharon washed her hands and face, then finally bedded down in her hard cot. The lights were turned out finally at 12 midnight.

Sharon had a fitful night of sleep that evening and was awakened very early that next morning by a small band of singing and guitar-playing minstrels rendering their version of "Morning Has Broken" through broadly smiling faces. All around her, the girls were leaping out of their cots to join the singing and to dress. Sharon struggled out of her bed hazily, glanced at her watch and thought to herself, "Five-thirty! Oh well, if they can do it so can I."

She dressed herself in her workshirt and denim overalls and went to the bathroom facility where she was greeted by a series of cheery "Good mornings." As she pulled out her toothpaste, one of the other girls seized it from her hands, and offered to squeeze it onto Sharon's brush. "Oh, thanks" Sharon said while the girl covered her toothbrush with Gleem. Sharon brushed her teeth, washed her face and was handed her towel by another smiling girl of no more than fourteen years. From the bathroom she was accompanied to the large dining hut by two other girls on either side of her who were commenting on the beauty of the day. "What day?" thought Sharon, "It's not even light out yet!"

The dining hut had a long table in the centre of it, already set. Sharon was seated with her two companions who poured her coffee and buttered her toast. "Thanks" she said meekly, wondering about all this lavish attention.

At the table, Gloria asked Sharon to tell the group a little about herself, while silence filled the hall. She spoke about her home town, family and school, portraying a picture of relative contentment. Gloria followed her brief expose with a similar sort of family circle picture that this group represented. "We stress love and cooperation for the benefit of everyone" she explained. "We all work together as a team—in a sense, a family."

After breakfast, one of the group leaders suggested starting up a softball game to which everyone eagerly agreed. "Come on Sharon!" cried Gloria as she tugged her by the hand in the direction of a large, green, dew-covered field which was just becoming illuminated by the blazing morning sun on the horizon. Two team leaders were picked and they selected players. Sharon and Gloria were put on the same team.

Both teams then formed a large circle separately, joining hands and started a little enthusiasm-building cheer. Sharon's team cheered, "Let's win team, let's win!" The cheer continued loudly for fifteen minutes. Sharon joined in the cheer but wondered why it had continued for so long. Each time she stopped cheering, she was encouraged to continue by the omnipresent Gloria. By the end of this time, her ears were buzzing, but she was quite happy with the "Team-spirit". Eventually, the two teams started the game. The other team started a cheer of their own during the game—"Let's fight with love and win with love!" This continued on monotonically for nearly a full hour while the game progressed. Sharon meanwhile, was starting to feel the fatigue from lack of sleep and the constant noise bombardment. She weakly joined in with the cheers, always being attended upon by others who encouraged her and held her hands.

The "game" ended some four hours later and Sharon had no idea who won. It didn't seem to matter much anyway, since she was relieved to get away from the constant din. She did, nevertheless enjoy the group contact. They made her feel like an integral part of their "family" despite the fact that she had been with them only for a short while.

As lunch time approached, Gloria and another girl sidled up to her smiling, and accompanied her, arm-in-arm to the dining hall. Sharon was not left alone for a split second to assess what was going on around her. She was being thoroughly "love-bombed".

Later that afternoon, a touch football game was organized; there was more cheering...more noise...more constant attention from other group leaders. The "game" ended a full four hours later. Sharon left the field smiling, perhaps a bit high from the group euphoria and very, very tired.

In the evening, mercifully there were no games organized, but rather "lectures" were presented by a senior group member who addressed the full gathering of the "flock". The discussion revolved upon love, values, inspirations and aspirations. Sharon was weak and tired, paying only partial attention to the speaker and was occasionally nudged on to listen by a nearby girl who would add, "Please try and listen Sharon, this part is really important." The lectures ended late in the evening and the girls headed over to their hut eagerly discussing the "key" points of the discussion. Sharon was asked what she felt was the most important idea discussed. "I guess it's love and cooperation with one's fellow man" was her reply.

Sharon went to be past midnight that evening, tired but happy, feeling that she was well accepted. "I mean, why else would they make such a fuss over me?" she thought to herself.

The following day was virtually a carbon copy of the previous day—noise, constant and unceasing contact with the group—not a moment to stand back and say "Hey! What's really going on here??!"

The evening lectures were again on topics of love, group security, "familial relations" etc. Sharon had no difficulty in accepting the things discussed as her own opinion. Even the occasional idea that was perhaps offf-beat for her started to make "sense".

That evening, before she was to leave and to continue her vacation in San Diego, Gloria asked her if she wanted to stay for another day. Without a split second of hesitation she agreed, forgetting her other commitments, or perhaps, knowingly putting them aside in lieu of her present desires.

Sharon stayed not only for a day, but for an entire week. In that brief period of time Sharon's critical thinking ability and normally good judgement were eliminated. Her values were changed drastically. She learned that the group was good and outsiders were possessed of evil. Her friends, parents and relatives were therefore "evil" since they were outside the confines of the closed eutopia. To be on one's own would mean succeptibility to the world and all its terrors. In this transition period, Sharon learned of the group founder, Reverand Dorey, whose teaching she quickly and methodically learned. His doctrine was no problem for her to accept and follow.

Sharon Nash, the individual, ceased to exist. Sharon Nash, the group member, now occupied her shell. She was now a bona fide "Dorie".

Karen, in the meantime had not heard from her and contacted the Nashes in New York, who headed immediately out to California in search of their missing daughter. They agreed to meet Karen in San Francisco, from whence the City Police were contacted and a missing person's report was filed. Pictures of Sharon were circulated to all membes of the department. Three nerve-racking days passed until finally one officer who patrolled a small inner city beat reported sighting a girl matching the description of Sharon Nash, selling flowers on a large shopping mall. The Nashes and Karen were summoned from their hotel to the police station where an officer accompanied them to the site described.

Indeed, the girl selling flowers was Sharon Nash!

Mrs. Nash sprang from the squad car with arms opened wide and clutched her daughter. With tears streaming from her tired, blood-shot eyes she exclaimed, "Sharon, you're safe, thank God you're alive!" Sharon made no effort to return the embrace, but rather stared coldly and blankly, smiling.

"Hi mom, do you want to buy a flower? It goes to support a non-denominational church organization."

"Sharon!" cried her father. "Don't you remember us. We're your parents! And look, Karen came with us!"

"Yeah, hi dad, hi Karen" she replied in a voice devoid of emotion, "How 'bout a flower for your lapel?"

The three were stunned by the icey reception given them, as the officer looked on.

"Sharon, it's me Karen! What happened to you? What church? What are you doing here?" At that moment, a senior group member approached the scene and said calmly, "Sharon, let's go. We're wasting time here."

The young man was seized by an enfuriated Mr. Nash who roared, "Who in hell are you?!"

"Please let go of me sir, Officer, please help me" the young man said calmly.

The officer paused for a moment, saying nothing, then finally said, "I think you'd better put him down Mr. Nash. He can get you into an awful lot of trouble. I recognize the kid. He's one of them Dories."

"No.." said Karen softly, "Not you Sharon, please tell me you're not one of them!"

Sharon did not reply as she gathered up her flowers and "donation" container. Without a word she turned and began to walk away with the other group member. Her parents were stunned, paralyzed, disbelieving—this was their daughter, but in a sense she wasn't. They watched as the two got into a 1965 brown VW and started the engine. For a moment, time stood still in Mr. Nash's mind. "This is my daughter! My flesh and blood! I won't let her do this!"

In plain view of the officer, his wife and Karen, Nash raced towards the VW, opened the driver's door and threw the young man out of the car and against an adjacent car with a resounding thud. He seized his daughter, dragging her across the front seat and out of the car. She kicked, scratched and bit her father viciously, but he was quite oblivious to her attempts at resistance. The officer, curiously made no attempt to stop the proceedings, even though what he was doing was against the law.

Nash carried Sharon into the police car, where she continued to struggle until he struck her across the face and she blacked out. The officer, Karen and Mrs. Nash joined him in the squad car and Mr. Nash, looking at his limp daughter said softly, "What can we do?"

The officer, without a word, started the car and they drove off. When the car had stopped, it was 45 minutes later and they were at 'Frisco International Airport. The officer said, "Take the first plane out of here and don't come back."

They unloaded from the police car and Mr. Nash turned to the silent officer and with puzzled gratitude asked, "Why are you doing this for us?"

The officer paused momentarily, lowering his eyes to the dashboard and said only, "My son is a Dorie too".

No more words had to be spoken. The meaning came through loud and clear.

They gave no heed to their personal belongings left behind. Their most important possession was now in their hands again.

Karen went ahead to purchase four tickets to New York with Mr. Nash's credit card. She would accompany Sharon back to be a comfort through what would surely be a most difficult transition back to the real world. It looked odd, but Mr. Nash didn't care as he carried his daughter from the terminal on to the plane. She was very weak, having been denied sleep and food and so she slept for most of the trip of six hours. While she slept, Karen described the working of the cult to the Nashes who listened intently. Karen suggested that professional help, in the form of psychiatric therapy might be the best approach. She explained that Sharon, despite being home, would still possess a different personality and would still be very much a "Dorie" until completely rehabilitated.

Poor Sharon had lost fifteen pounds, lost her individuality and had gained confused "bliss" for her trouble.

When the plane touched down in New York, they

wasted no time in taxiing her to New York University Hospital were she was admitted to Intensive Care, for fluid rehydration, and she was started on intravenous feedings. In addition she would undergo tests later for what appeared to be early signs of infectious hepatitis. The Nashes and Karen stayed the entire evening in a nearby waiting room, wondering and worrying. In the morning a physician from the Intensive Care Unit came and spoke to them, informing them that Sharon would be placed under the division of Psychiatry. Dr. Goldforth, who headed up this division had handled several such cases in the past with good success and was to be her therapist...Goldforth came down to ICU that same morning to speak with them. He reassured them that Sharon would be handled properly and rehabilitated back into the real world from which she had been snatched.

Relieved and thankful, the three returned to Long Island to recouperate from their night-long vigil. Late that same evening, they received a frantic telephone call from the hospital instructing them to come down immediately. Sharon had apparently removed her intravenous needle and used it to slit a major artery in her neck. True to her teachings, she knew that death was preferable in this case to life amongst the world's "evil".

The vascular surgeons worked furiously to save her life but it was too late; her blood loss was enormous, causing her to lapse into a coma from which she would never recover.

The sun was just starting to set in San Francisco at about this time, as two young "Dories" were seen striking up friendly conversation with a young stranger at 'Frisco International.□

Curried Favour

The one
whose
friend's backs
stand in the way
of his knives
whose
tongue is moistened
by the spittle
of circumstance
whose
bronzed-nose derives
from a place
where the sun never shines
is
the one
who
invariably ends up
able to chew less
than he can fit
into his mouth

Robert Hegele

Through the Door

A child's face once peered through the windowglass
And she caught glimmers of life without chains.
The forbidden threshold is reached at last
But the debutante, unshakled, remains.

Freed from the prison of self-sacrifice,
Clutching a pass to a cherished career,
Wondering whether her bags will suffice,
She opens the door with hesitant fear.

Outside shines the sun while summerwinds dance
Mankind and nature try working as friends.
Life's traffic hurries as drivers advance;
Highways and side streets, detours and dead ends.

Womanchild, womanchild, come through the door.
Hear the birds singing as life's engines roar.

Lynn McIntyre

Winter

I remember,
silent snowing nights,
with starlight glistening from
soft-white folds,
and crisp snow, crunching, keeping time
with small booted, shuffling steps.

I remember,
silence over cold snow capped hilltops,
tearing away short rasping breaths
like wisps of smoke,
and tossing them to the night time black.

I remember,
being small and blowing smoke,
blinking back at the cold distant stars
and becoming smaller from within.

And I remember,
being young and laughing
at the fallen angels in the snow.

I see the snow falling
from grey clouded skies
to wet, gritty streets
and I remember when a warm bed
could keep the cold from creeping in.

Catherine Flowitt

(continued from page 107)

Many students included teaching as a routine for many medical disciplines. We have had many excellent clinical teachers and most of them are not paid for their participation. It should not be forgotten that the school administration has put in a tremendous effort in organizing an army of teaching staff and matching them to students in groups of six.

Lastly, the school year is rapidly drawing to an end. The class of 8T1 will not share the same roof again until the LMCC examination. On behalf of the Medical Journal, Les Urbankiewicz and myself, I would like to thank you all for your participation in this survey and wish you good luck in your future practice.□

Acknowledgements

Dr. U. Ambus general surgeon TGH
Dr. E. Rumble orthopedic surgeon TGH
Dr. Ilvers thoracic surgeon TGH
Dr. J. Gruss plastic surgeon Sunnybrook
Dr. M. Greenspan urologist TGH
Dr. C.H. Marryatt anaesthetist TGH
Dr. B. Rowat emergency TGH
Dr. W.H. Francombe hematologist TGH
Dr. J. Edmeads neurologist Sunnybrook
Dr. D.A.G. Mickle clinical biochemist TGH
Dr. J. Campbell radiologist Sunnybrook
Dr. S.C. Luk pathologist Mt. Sinai Hosp.
Dr. J. Dornan rehabilitation medicine TGH
Dr. Mahon and Dr. E. Sellers clinical pharmacologists
Dr. M.C. Wills occupational medicine Ontario Hydro

(continued from page 112)

had always thought that patients came to hospital with heart attacks, strokes, asthma and kidney disease, to name but a few ailments. It seems that I was sadly mistaken, they all have MI, CVA, RTA, SLE, COLD and CA—the only possible cure for these things seems to me to be liquid paper.

Before I conclude this sad tale, I should report a very strange event that occurred recently. In a Cardiology clinic the other day, I found myself, with full comprehension of my action, informing my clinician that my patient had suffered an MI. I would not like to base any conclusions on a single event but is it possible that after repeated insult with the acronymogen that I am finally developing tolerance? Why just a few months ago I would cring and whimper at the sound of the term MI and now, I am glibly using it myself. Who knows where things will go from here? Next week I could be discussing CVA or COLD and maybe eventually, I will even muster up the courage to nonchalantly mention LVEDP. I hate to get my hopes too high, but maybe some day I'll be able to have a conversation with my brother!□

(continued from page 113)

decided the "alpha" is an "other" who merits being "done unto." Clearly, this is not the case in the vast majority of abortions performed today. He expends considerable effort in contemplating the current situation and decrying the "unexamined utilitarian ethos and corresponding situation ethic that have led us to this monstrous abortion situation."

In the final two chapters, Dr. Nathanson critically examines the Roe vs. Wade decision. He points out that it is dubiously founded on the concept of viability, which is vague to begin with and is in a constant state of flux, rapidly changing as medical technology advances.

Finally, in an epilogue, he looks at abortion in the light of this developing technology suggesting again that technology itself may help solve the abortion dilemma (eg., by providing an artificial placenta). He does however, acknowledge that this could be the source of yet even greater ethical problems.

His parting statement is sobering: "Only the recognition that alpha is but one of us, and that we must welcome it back to the community of mankind, will serve us as a reliable guide for our implacable future."□

WE CAN HELP YOU PREPARE FOR:

OUR 41st YEAR

MCAT
LSAT · GMAT
GRE · GRE PSYCH
GRE BIO · SAT
DAT · VAT · OCAT
MAT · PCAT
NAT'L MED BDS
NDB · NPB · NLE
ECFMG · FLEX
TOEFL
VQE

Stanley H. KAPLAN
EDUCATIONAL CENTER
OF TORONTO LTD

The test preparation specialist since 1938

Come visit our center for a free demonstration lesson

Call Days, Eves & Weekends
485-1930

1992 Yonge St, Suite 301
Toronto, Ont. M4S 1Z7

Other Centers In More Than
80 Major U S Cities & Abroad

The Editors would like to thank the staff and all those who contributed to the Journal this year.

It was a real pleasure working on the Journal and we wish next year's editors and staff a year as interesting and enjoyable as this one was for us.

Thanks are also in order for the fine work of Visual Media Productions and our printers.

We would also like to express appreciation to our generous patrons and the Medical Society and encourage their continued support. Mrs. Randall's help and smile were appreciated again this year.

Most of all, thank-you for reading the Journal throughout the year. We hope you've enjoyed it. We have.

Dorianne Rheaume 8T1
Robert Hegele 8T1

IT TAKES A STRONG WILL TO BEAT CANCER

Imagine for a moment a world where cancer is as obsolete as the dinosaur. It can happen. The research is willing but unfortunately the funds are weak.

All bequests received by the Canadian Cancer Society are used to support cancer research, unless otherwise stipulated in the will.

That's where you come in. Please insert one simple sentence in your will: "I give to the Canadian Cancer Society the sum of _____ dollars."

Our hope is to free the world from cancer. And where there's a will, there's a way.

Canadian Cancer Society

CAN CANCER BE BEATEN? YOU BET YOUR LIFE IT CAN?

PATRONS

Each year a number of our supporters donate an amount well above and beyond the mere subscription rate. For their generous financial support (with its consequent psychological boost) we would like to extend our sincere thanks to the following individuals:

Dr. P.W. Alberti, Toronto
Dr. E.C. Allen, Toronto
Dr. Crawford S. Anglin, Toronto
Dr. R.J. Angus, Toronto
Dr. Mary Jane Ashley, Toronto
Dr. Michael A. Baker, Toronto
Dr. Maxwell B. Bardenstein, Michigan
Dr. Patrick F. Beirne, Toronto
Dr. W.D. Bennett, Toronto
Dr. Stanley C. Best, Toronto
Dr. John A. Beswick, Westhill
Dr. J.S. Brezina, Toronto
Dr. Gerard N. Burrow, Toronto
Dr. Sheila Cohen, Willowdale
Corporation Professionnelle
Des Medecins Du Quebec
Dr. Donald H. Cowan, Toronto
Dr. Ronald M. Cyr, Toronto
Dr. Donald J. Currie, Toronto
Dept. of Nutrition and Food Science
and Dept. of Surgery, UofT
Dr. H. Roslyn Devlin, Toronto
Dr. Robert E. Ecclestone, Oakville
Dr. Emmanuel Farber, Toronto
Dr. John M. Finlay, Toronto
Dr. Ross Fleming, Toronto
Dr. Jack L. Fowler, Oakville
Dr. W.H. Francombe, Toronto
Dr. A.E. Franklin, Toronto
Dr. Frieda H. Fraser, Burlington
Dr. John Frederickson, Toronto
Dr. A. Freiberg, Toronto
Dr. G.L.A. From, Toronto
Dr. A. Geisler, Mississauga
Dr. David M. Goldberg, Toronto
Dr. Melvyn Goldberg, Toronto
Dr. Irvin Gollish, Toronto
Dr. Patricia Goodhall-Gunn, Islington
Dr. Duncan A. Gordon, Toronto
Governing Council (UofT)
Dr. C.C. Gray, Toronto
Dr. Allan E. Gross, Toronto
Dr. L.F.L. Grover, Islington
Dr. Abraham L. Halpern, N.Y.
Dr. Arthur W. Ham, Markham
Dr. Gerald D. Hart, Toronto
Dr. Robert C. Hicks, Toronto
Dr. F. Marguerite Hill, Toronto
Dr. Irwin M. Hilliard, Westhill
Dr. R.B. Holmes, Toronto
Dr. M.A. Hutcheon, Toronto
Dr. Aden C. Irwin, Halifax
Dr. Mary V. Jackson, Toronto
Dr. F.L. Johnson, Hamilton
Dr. James H. Kerr, Don Mills
Dr. E.C. Keystone, Toronto
Dr. J.S. Keystone, Toronto
Dr. C.R. Lamenza, Toronto
Dr. Bernard Langer, Toronto
Laurier Life Insurance, Toronto
Dr. W.D. Leers, Toronto
Dr. Jack R. Leitch, Toronto
Eli Lilly and Co. Ltd., Scarborough
Dr. K.E. Livingston, Toronto
Dr. L.F.W. Loach, Toronto
Dr. Ross C. Mackay, Toronto
Dr. R. MacKenzie, Toronto
Dr. L.W. MacPherson, Toronto
Dr. Ralph T. Manktelow, Toronto
Dr. Bruce Marshall, St. Mary's
Dr. Keith L. Moore, Toronto
Dr. Peter Paul Morgan, Ottawa
Dr. Rebeka Moscarello, Toronto
Dr. James F. Murray, Don Mills
Dr. Daniel H. Osmond, Toronto
Dr. F.R. Papsin, Toronto
Dr. Arthur E. Parks, Willowdale
Dr. F.R. Pember, Colborne
Dr. R.L. Perkin, Mississauga
Dr. Mel E. Petersiel, Scarborough
Dr. C.P. Rance, Toronto
Dr. Alexander Roberts, Toronto
Dr. Robert B. Salter, Toronto
Dr. E.A. Sellers, Toronto
Dr. R.H. Sheppard, Toronto
Dr. Richard B. Simpson, Toronto
Dr. Ruth Sky, Toronto
Dr. J. Donald Smith, Mississauga
Dr. D. A. Stewart, Toronto
Dr. Robert Stone, Toronto
Dr. Ron Taylor, Toronto
Dr. Charles H. Tator, Toronto
Dr. Joan Vale, Toronto
Dr. Daniel G. Vaughan
Dr. Robert Volpe, Toronto
Dr. Paul G. Walfish, Toronto
Dr. Gary Webb, Toronto
Dr. Douglas R. Wilson, Toronto
Dr. J.K. Wilson, Toronto
Dr. G. E. Wodehouse, Toronto
Dr. Manley S. Wolochow, Richmond, B.C.
Dr. C.R. Woolf, Toronto
Dr. J.R. Wright, Toronto
Dr. Walter Zingg, Toronto
Dr. Ronald M. Zuker, Toronto

THE BEST IN QUALITY
FOR LESS MONEY

WHITE CROSS SURGICAL MEDICAL SUPPLIES

DIV. OF WHITE CROSS SURGICAL INSTRUMENTS LTD

260 RICHMOND STREET WEST — TELEPHONE (416) 598-4567

TORONTO, ONTARIO M5V 1W8

We offer to the Canadian medical students, the best prices on all brand name quality instruments. Speedy service!

- **Dissecting Kits equipped with operating room quality instruments**
- **Otoscope, Ophtholmoscope diagnostic sets**
- **Sphygmomonometers with 10 year written guarantee**
- **Percussion and Neurological hammers**
- **Leather medical bags made of top grain cowhide**
- **Penlights**
- **Tape Measures**
- **Thermometers**
- **Eye Charts**
- **Tuning Forks**

Branch offices in
WINNIPEG
OTTAWA
HALIFAX

And whatever instruments you might need.

WE HAVE SERVED THE MEDICAL STUDENT SOCIETY FOR THE LAST TWENTY YEARS, AND WE WOULD LIKE TO SERVE YOU!

The Medical Alumni Association in addition to supplying direct financial help to graduates and undergraduates, also gives financial support to the Medical Society (Arts & Letters, Yearbook, Orientation) and the Faculty of Medicine (Dean's Fund, Update and supplementing the cost of the Cody Gold and Silver Medals). Members of the Executive Committee are representative of the alumni on the Admissions Committee (it was through the work of the alumni that admission requirements were changed to consider the 60-40 weighting); two representatives on the Faculty Council; two representatives on the University of Toronto Alumni Association; and two representatives on the College of Electors.

The Student Aid Committee of the University of Toronto Medical Alumni Association has a budget of $45,850 for 1979-80. This money is to be spent as follows:

Scholarships (3 year scholarships of $250 each, and a graduation scholarship of $600)	$1,350
Undergaduate Bursaries (This bursary money is awarded through the Faculty Undergraduate Awards Committee)	6,000
Graduate Bursaries	1,000
Medical Student Summer Fellowships (14 Fellowships at $2,000. 2 of these are for Family Pracice)	28,000
Medical Student Transportation Fund (This Fund is primarily intended for Medical student electives, although applications for travel connected with work experience are also accepted. The maximum individual grant is $150. Applications for 1980-81 electives are accepted up to April 30, 1980 for the period June 5, 1980 to November 19, 1980, and up to October 1, 1980 for the period November 20, 1980 to May 6, 1981. Late applications will **NOT** be considered.)	7,500
Fund for Educational Acivities	1,000
Not yet assigned	1,000

There are three additional Alumni Association scholarship awards. The **Samuel J. Streight, O.B.E., M.D., Scholarship in Internal Medicine.** (value $240) is awarded annually to a student in the final year who has high standing in Internal Medicine. The **K.J.R. Wightman Award in Internal Medicine** (value $100) is awarded annually to a final year student who has achieved high standing in Internal Medicine.

The Association administers two special funds. The **Dr. Bernard A. Manace Award** (value $150) provides assistance to a Medical student from any year who is undertaking an elective or summer Medical experience in Israel. Preference is given to students working in the area of Allergy or Immunology. Consideration is given to academic standing. The **Dr. L. Nelles Silverthorne Award** (value $140) provides assistance to a Medical student from any year who is undertaking an elective or summer Medical experience in a remote area. Preference is given to a student working in a mission hospital. Consideration is given to financial need. The deadline for applications for these two awards is March 1, 1980 for the subsequent 12 month period. As with the Medical Student Transportation Fund, late applications will not be considered.

The **Dr. Delbert S. Hoare Medical Alumni Undergraduate Award** has been started this year. The principal objective of this Award is the applicant's contribution to the "continuing role of the Alumni Association among the undergraduates of the Faculty of Medicine."

The Association has four loan funds. The **Dr. Ernest J. Clifford Medical Alumni Association Undergraduate Loan Fund** provides short term, interest free loans to Medical students who require financial assistance during periods of temporary difficulty. The **Robert Elgin Towle Loan Fund** provides interest free loan assistance to women undergraduates. The **Medical Alumni Association Graduate Loan Fund (including the Emma Bissell and Agnes E. Hamshaw Funds)** provides interest free loans of up to $1,500 per year to physicians taking postgraduate training. The **Alexander and Martha Dalrymple Loan Fund in Psychiatry** provides interest free loans for physicians taking postgraduate training in Psychiatry. This fund is administered jointly by the Association and the University Department of Psychiatry.

Further information about any of the above, and application forms where required, can be obtained from Mrs. N.S. Shenstone, Secretary, Medical Alumni Association at Room 3245, M.S.B., phone 979-1539.